15. **DATA SHEETS**

- COTR Vehicle Work Order
- 2. Report of Vehicle Condition
- 3. Certification Label and Tire Placard (FMVSS 110 label) Information
- 4. Rear Outboard Seating Position Seat Belts (S4.1.4.2(b) and S4.2.4)
- 5 Air Bag Labels (S4.5.1)
- 6. Readiness Indicator (S4.5.2)
- 7. Passenger Air Bag Manual Cut-Off Device (S4.5.4)
- 8. Lap Belt Lockability (S7.1.1.5)
- Seat Belt Warning System (S7.3)
- 10. Belt Contact Force (S7.4.3)
- 11. Latchplate Access (S7.4.4)
- 12. Seat Belt Retraction (S7.4.5)
- 13. Seat Belt Guides and Hardware (S7.4.6)
- 14. Marking of Reference Points for Various Test Positions and Points
- 15. Suppression Test Using 12-Month-Old CRABI Dummy (S20)
- 16 Suppression Test Using Newborn Infant Dummy (S20)
- 17. Suppression Test Using 3-Year-Old Dummy and Booster Seats (S22) (Appendix H, Data Sheet 16H when using a Representative 3-Year Old Child)
- 18. Suppression Test Using 3-Year-Old Dummy and Forward Facing Convertible Child Restraints (S22) (Appendix H, Data Sheet 17H when using a Representative 3-Year Old Child)
- 19. Suppression Test Using an Unbelted 3-Year-Old Dummy (S22) (Appendix H, Data Sheet 18H when using a Representative 3-Year Old Child)
- 20. Suppression Test Using 6 Year-Old-Dummy and Booster Seats (S24.2.1) (Appendix H, Data Sheet 19H when using a Representative 6-Year Old Child)
- 21. Suppression Test Using an Unbelted 6- Year-Old-Dummy (S24.2.1) (Appendix H, Data Sheet 20H when using a Representative 6-Year Old Child)
- 22. Low Risk Deployment Test Using 12-Month-Old CRABI Dummy (S20.4)
- 23. Low Risk Deployment Test Using an Unbelted 3-Year-Old Dummy (S22.4) Position 1-Chest on IP
- 24. Low Risk Deployment Test Using an Unbelted 3-Year-Old Dummy (S22.4) Position 2-Head on IP
- 25. Low Risk Deployment Test Using an Unbelted 6-Year-Old Dummy (S24.4) Position 1-Chest on IP
- 26. Low Risk Deployment Test Using an Unbelted 6-Year-Old Dummy (S24.4) Position 2-Chest on IP
- 27. Low Risk Deployment Test Using an Unbelted 5th Percentile Female Dummy (S26) Position 1-Chin on module
- 28. Low Risk Deployment Test Using an Unbelted 5th Percentile Female Dummy (S26) Position 2-Chin on rim
- 29. Test of Reactivation of the Passenger Air Bag System with an Unbelted 5th Percentile Female Dummy (Appendix H, Data Sheet 25H when using a Representative 5th Percentile Female)
- 30. Vehicle Weight, Fuel Tank, and Attitude Data
- 31. Vehicle Accelerometer Locations
- 32. Photographic Targets
- 33 Camera Locations
- 34. Dummy Positioning (See the appendices for the data sheets)
- 35. Dummy measurements
- 36. Crash Test
- 37. Offset Deformable Barrier Test Using Belted 5th Percentile Female Dummy (S18)
- 38. Accident Investigation Measurements
- 39. Windshield Mounting (FMVSS 212)
- 40. Windshield Zone Intrusion (FMVSS 219)
- 41. Fuel System Integrity (FMVSS 301)

DATA SHEET 1COTR Vehicle Work Order

Vehicle	model year, make, and model _		······································
NHTSA	N no	Date	_
COTR	signature		
Tests to	be performed for this vehicle ar	e checked below.	
1.	Rear outboard seating position	seat belts (S4.1.4.2(b) & (S4.2.4)
2.	Air bag labels (S4.5.1)		
3.	Readiness indicator (S4.5.2)	Off Davids (04 5 4)	
<u>_</u> 4.	Passenger Air Bag Manual Cut-	Off Device (54.5.4)	
5.	Lap belt lockability (\$7.1.1.5)	\	
6. 7.	Seat belt warning system (S7.3) Seat belt contact force (S7.4.3))	
—′· 8.	Seat belt latch plate access (S7	1 1 1	
—8. 9.	Seat belt retraction (\$7.4.5)	. 7. 7)	
	Seat belt guides and hardware	(S7 4 6)	
11.			(Part 572, Subpart R) using the following
	indicated child restraints.		(· ··· · · -, · · · · · · · · · · · · ·
	Section B		
	Britax Handle with Care 191	Full rearward	Mid position Full forward
	Century Assura 4553	Full rearward	Mid position Full forward
	Century Avanta SE 41530	Full rearward	Mid position Full forward
	Century Smart Fit 4543	Full rearward	Mid position Full forward
	Cosco Arriva 02727	Full rearward	Mid position Full forward
	Cosco Opus 35 02603	Full rearward	Mid position Full forward
	Evenflo Discovery Adjust		
	Right 212		Mid position Full forward
	Evenflo First Choice 204	Full rearward	Mid position Full forward
	Evenflo On My Way Position	Full roomword	Mid position Full forward
	Right V 282 Graco Infant 8457		Mid position Full forward Mid position Full forward
	Section C	Full lealwald	iviid position Full forward
	Britax Roundabout 161	Full rearward	Mid position Full forward
	Century Encore 4612		Mid position Full forward
	Century STE 1000 4416		Mid position Full forward
	Cosco Olympian 02803	Full rearward	Mid position Full forward
	Cosco Touriva 02519	Full rearward	Mid position Full forward
	Evenflo Horizon V 425		Mid position Full forward
	Evenflo Medallion 254		Mid position Full forward
12.	Suppression tests with Newborn	n infant (Part 572, Sub	ppart K) using the following indicated child
	restraints.		
	Section A		
	Cosco Dream Ride 02-719		Mid position Full forward
13.			Subpart P) using the following indicated child
	restraints where a child restraint	t is required.	
	Section C	F. II as a successful	Mid a selfina — Full femoral
	Britax Roundabout 161		Mid position Full forward
	Century Encore 4612 Century STE 1000 4416	Full rearward Full rearward	Mid position Full forward Mid position Full forward
	Cosco Olympian 02803		Mid position Full forward Mid position Full forward
	Cosco Touriva 02519	Full rearward	Mid position Full forward
	Evenflo Horizon V 425	Full rearward	Mid position Full forward
	Evenflo Medallion 254	Full rearward	Mid position Full forward
	Section D		

	Britax Roadster 9004	Full rearward Mid position Full forward
	Century Next Step 4920	Full rearward Mid position Full forward
	Cosco High Back	
	Booster 02-442	Full rearward Mid position Full forward
	Evenflo Right Fit 245	Full rearward Mid position Full forward
14. 5	Suppression tests with Represen	tative 3-year-old child using the following indicated child restraints
	where a child restraint is require	ed. (Appendix H, Data Sheet 16H and 17H)
	Section C	
	Britax Roundabout 161	Full rearward Mid position Full forward
	Century Encore 4612	Full rearward Mid position Full forward
	Century STE 1000 4416	Full rearward Mid position Full forward
	Cosco Olympian 02803	Full rearward Mid position Full forward
	Cosco Touriva 02519	Full rearward Mid position Full forward
	Evenflo Horizon V 425	Full rearward Mid position Full forward
	Evenflo Medallion 254	Full rearward Mid position Full forward
	Section D	
	Britax Roadster 9004	Full rearward Mid position Full forward
	Century Next Step 4920	Full rearward Mid position Full forward
	Cosco High Back	
	Booster 02-442	Full rearward Mid position Full forward
	Evenflo Right Fit 245	Full rearward Mid position Full forward
15.	Suppression tests with 3-year-o	old dummy (Part 572, Subpart P) in the following positions
	Sitting on seat with back aga	inst seat back (S22.2.2.1)
	Sitting on seat with back aga	inst reclined seat back (S22.2.2.2)
	Sitting on seat with back not	against seat back (S22.2.2.3)
	Sitting on seat edge, spine ve	ertical, hands by the child's side (S22.2.2.4)
	Standing on seat, facing forw	vard (S22.2.2.5)
	Kneeling on seat facing forward	ard (S22.2.2.6)
	Kneeling on seat facing reary	ward (S22.2.2.7)
	Lying on seat (S22.2.2.8)	
16.	Suppression tests with represen	ntative 3-year-old child in the following positions
	Sitting on seat with back aga	
	Sitting on seat with back aga	inst reclined seat back (S22.2.2.2)
	Sitting on seat with back not	against seat back (S22.2.2.3)
	Sitting on seat edge, spine ve	ertical, hands by the child's side (S22.2.2.4)
	Standing on seat, facing forw	vard (S22.2.2.5)
	Kneeling on seat facing forward	ard (S22.2.2.6)
	Kneeling on seat facing reary	ward (S22.2.2.7)
	Lying on seat (S22.2.2.8)	
17.		old dummy (Part 572, Subpart N) using the following indicated
	child restraints where a child re	straint is required.
	Section D	
	Britax Roadster 9004	Full rearward Mid position Full forward
	Century Next Step 4920	Full rearward Mid position Full forward
	Cosco High Back	
	Booster 02-442	Full rearward Mid position Full forward
	Evenflo Right Fit 245	Full rearward Mid position Full forward
18.		ntative 6-year-old child using the following indicated child
	restraints where a child restrain	t is required.
	Section D	
	Britax Roadster 9004	Full rearward Mid position Full forward
	Century Next Step 4920	Full rearward Mid position Full forward
	Cosco High Back	
	Booster 02-442	Full rearward Mid position Full forward
	Evenflo Right Fit 245	Full rearward Mid position Full forward
19.		old dummy (Part 572, Subpart N) in the following positions
	Sitting on seat with back aga	
		inst reclined seat back (S22.2.2.2)
	SUUDA OD PERE PROPERTIES VA	

20.	Sitting back in the seat and leaning on the right front passenger door (S24.2.3) Suppression tests with representative 6-year-old child in the following positionsSitting on seat with back against seat back (S22.2.2.1)
	Sitting on seat with back against reclined seat back (S22.2.2.2)Sitting on seat edge, spine vertical, hands by the dummy's side (S22.2.2.4)Sitting back in the seat and leaning on the right front passenger door (S24.2.3)
21.	Test of Reactivation of the Passenger Air Bag System with an Unbelted 5 th Percentile Female Dummy (S20.3, S24.3) Perform this test after the following suppression test(s):
00	Total of December of the December Air December with a general state of the December of the Dec
22.	Test of Reactivation of the Passenger Air Bag System with a representative 5 th Percentile Female (S20.3, S24.3) Perform this test after the following suppression test(s):
23.	Low risk deployment test with 12-month-old dummy (Part 572, Subpart R) using the following
	indicated child restraints.
	Section B
	Britax Handle with Care 191 Full rearward Mid position Full forward Century Assura 4553 Full rearward Mid position Full forward
	Century Assura 4553 Full rearward Mid position Full forward Century Avanta SE 41530 Full rearward Mid position Full forward
	Century Smart Fit 4543 Full rearward Mid position Full forward
	Cosco Arriva 02727 Full rearward Mid position Full forward
	Cosco Opus 35 02603 Full rearward Mid position Full forward
	Evenflo Discovery Adjust
	Right 212 Full rearward Mid position Full forward
	Evenflo First Choice 204
	Evenflo On My Way Position
	Right V 282 Full rearward Mid position Full forward
	Graco Infant 8457 Full rearward Mid position Full forward
	Section C
	Britax Roundabout 161 Full rearward Mid position Full forward
	Century Encore 4612 Full rearward Mid position Full forward
	Century STE 1000 4416
	Cosco Olympian 02803 Full rearward Mid position Full forward
	Cosco Touriva 02519 Full rearward Mid position Full forward
	Evenflo Horizon V 425 Full rearward Mid position Full forward
24	Evenflo Medallion 254 Full rearward Mid position Full forward
24.	Low risk deployment test with 3-year-old dummy (Part 572, Subpart P) in the following positions Position 1
	Position 2
25.	Low risk deployment test with 6-year-old dummy (Part 572, Subpart N) in the following positions
	Position 1
	Position 2
26.	Low risk deployment test with 5 th female dummy (Part 572, Subpart O) in the following positions
	Position 1
	Position 2
27.	Impact tests
	Frontal Oblique Test Speed
	Belted 50 th male dummy driver and passenger ((0 to 48 kmph) (S5.1.1.(a))
	Unbelted 50 th male dummy driver and passenger ((0 to 48 kmph) (S5.1.2(a)(1))
	Unbelted 50 th male dummy driver and passenger ((32 to 40 kmph) (S5.1.2(a)(1) or S5.1.2(b))
	Frontal 0° Test Speed
	Belted 50 th male dummy driver ((0 to 48 kmph) (S5.1.1(b)(1) or S5.1.1(a))
	Belted 50 th male dummy passenger ((0 to 48 kmph) (S5.1.1(b)(1) or S5.1.1(a))
	Belted 5 th female dummy driver ((0 to 48 kmph) (S16.1(a))
	Belted 5 th female dummy passenger ((0 to 48 kmph) (S16.1(a)) Belted 50 th male dummy driver and passenger ((0 to 56 kmph) (S5.1.1(b)(2)(
	Donos do maio daminy driver and passellati (10 to 30 kmbit) (03. 1. kb/t/2/t

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__Unbelted 50<sup>th</sup> male dummy driver and passenger ((0 to 48 kmph) (S5.1.2(a)(1))
__Unbelted 50<sup>th</sup> male dummy driver ((32 to 40 kmph) (S5.1.2(a)(2) or S5.1.2(b))
__Unbelted 50<sup>th</sup> male dummy passenger (32 to 40 kmph) (S5.1.2(a)(2) or S5.1.2(b))
__Unbelted 5<sup>th</sup> female dummy driver (32 to 40 kmph) (S16.1(b))
__Unbelted 5<sup>th</sup> female dummy passenger (32 to 40 kmph) (S16.1(b))
__40% Offset 0° Belted 5<sup>th</sup> female dummy driver and passenger (0 to 40 kmph) (S18.1)
__28. Sled test: Unbelted 50<sup>th</sup> male dummy driver and passenger (S13)
__29. FMVSS 204 indicant test
__30. FMVSS 212 test
__31. FMVSS 219 indicant test
__32. FMVSS 301 frontal test
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DATA SHEET 2

Page 1 of 2

REPORT OF VEHICLE CONDITION

CONTR	RACT NO. DTNH22			Date:	
FROM:					
i itolvi.	Lab & rep name				
TO:			OVSC, N	SA-31	
	COTR Name				
PURPC	OSE: () Initial Receipt	() Receive	ed ()	Present	
MODEL	Receipt YEAR/MAKE/MODEL/	VIA Transfer BODY STYLE:	venio	BODY COLOR: GAWR (Rr) DATE DATE	
MANUE	ACTURE DATE:	NHTSA N	IO .	BODY COLOR:	
\/INI·	7.0101.E.D. (12.	GVWR GAV	NR (Fr)	GAWR (Rr)	_
ODOMI	ETER READINGS:	ARRIVAI	miles	DATE	
OBOIM	TERRICA CONTROL	COMPLETION	miles	DATE	
PURCE	IASE PRICE: \$	DFALFI	 R'S	5,112	
NAME.					
1 W (WIE.					
A.		ON "WINDOW STICI	KER" ARE PRES	ENT ON THE TEST VEHICLE.	
	YesNo				
B.	TIRES AND WHEEL R	IMS ARE NEW AND 1	THE SAME AS LI	STED.	
C	YesNo			OD ELAWS	
C.	THERE ARE NO DENT	15 OR OTHER INTER	IOR OR EXTERI	OR FLAWS.	
D.		EEN PROPERLY PRE	PARED AND IS	IN RUNNING CONDITION.	
	YesNo				
E.	KEYLESS REMOTE IS	S AVAILABLE AND WO	ORKING.		
	YesNo				
F.	THE GLOVE BOX CON			RRANTY DOCUMENT,	
	CONSUMER INFORM	ATION, AND EXTRAS	SET OF KEYS.		
_	YesNo	D 0 4 D 10 01 1DD1 1ED		ELIIOL E	
G.	PROPER FUEL FILLEI Yes No	R CAP IS SUPPLIED	ON THE TEST V	EHICLE.	
H.		MADKED IDENTIEV	VEHICLE WITH N	NHTSA NUMBER AND FMVSS	
п.				FOR SCHOOL BUSES, PLACE	۸
				D AND TO THE EXTERIOR	А
	FRONT AND REAR SI		THE WINDSHIEL	DAND TO THE EXTERIOR	
	Yes No	DE OF BOS.			
I.	PLACE VEHICLE IN S	TORAGE AREA			
	Yes No	TOTAGE AINEA.			
J.		E'S INTERIOR AND	EXTERIOR INC	LUDING ALL WINDOWS, SEAT	2
J .				IPLETE AND FUNCTIONAL PE	
				E, MISADJUSTMENT, OR OTHE	
				ST PROGRAM OR TEST	_1\
				MAL CONDITION TO THE NHTS	ιΔ
	COTR BEFORE BEGIN		T ANT ADNOTE	IAL CONDITION TO THE NITTO	,,,
	Vehicle OKCond		in comment secti	on	
	verilide Oitcont	altions reported below	iii comment secti	OH	
Identify	the letter above to which	h any of the following	comments apply		
	ents:				

Page 2 of 2

REPORT OF VEHICLE CONDITION AT THE COMPLETION OF TESTING

LIST OF FMVSS TE	ESTS PERFORME	ED BY THIS LAB:	
MODEL YEAR/MAK	KE/MODEL/BODY	STYLE:	
NHTSA NO			
	o longer on the tes		rious page:
Explanation for equ	ipment removal: _		
RECORDED BY: _ DATE:			
APPROVED BY: DATE:			
######################################		***************************************	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
	REL	EASE OF TEST VEHICLI	≣
The vehicle describ	ed above is releas	sed from	to be delivered to
Date:			(Laboratory)
Lab Representative	: Signature		Title
Carrier/Customer R	epresentative:	Signature	Date

DATA SHEET 3

Certification Label and Tire Placard Information

NHTSA	A No	Test	Date:
Labora	tory:	Test Technician(s): _	
1.	Certification Label Manufacturer Date of Manufacture VIN Vehicle certified as:Passenger car Front axle GVWR Rear axle GVWR Total GVWR	TruTru	
2.	Tire PlacardN/A – Vehicle is not a passenger carThis is not a passenger car (see the istill contained on a vehicle label and istill contained on a vehicle label and istill contained on a vehicle label and istill contained seating capacity front Designated seating capacity rear Total Designated seating capacity Recommended cold tire inflation pressure Recommended cold tire inflation pressure Recommended tire size	and does not have a ti tem 1 above), but all o s reported here. re front re rear	
Signatu	ure		 Date

73 TP208-12

DATA SHEET 4REAR OUTBOARD SEATING POSITION SEAT BELTS

NHTSA No.	Test Da	te:
Laboratory:	Test Technician(s):	
Do all rear outboard seating positions have	e type 2 seat belts? Yes	; No
If NO, describe the seat belt installed, the sthat would explain why a type 2 seat belt w		ormation about the sea
DEMARKO		
REMARKS:		
Signature		Date

DATA SHEET 5

AIR BAG LABELS (S4.5.1)

NHTS	SA No Test Date:
Labor	ratory: Test Technician(s):
1.	Air Bag Maintenance Label and Owner's Manual Instructions: (S4.5.1(a))
1.1	Does the manufacturer recommend periodic maintenance or replacement of the air bag? Yes (Go to 1.2); No (Go to 2)
1.2	Does the vehicle have a label specifying air bag maintenance or replacement? Yes-Pass;No-FAIL
1.3	Does the label contain one of the following?Yes-Pass; No-FAIL
	Check applicable schedule
	Schedule on label specifies month and year (Record date)
	Schedule on label specifies vehicle mileage (Record mileage)
	Schedule on label specifies interval measured from date on certification label (Record interval)
1.4	Is the label permanently affixed within the passenger compartment such that it cannot be
	removed without destroying or defacing the label or the sunvisor?
	Yes-Pass; No-FAIL
1.5	Is the label lettered in English?
	Yes-Pass; No-FAIL
1.6	Is the label in block capitals and numerals?
	Yes-Pass; No-FAIL
1.7	Are the letters and numerals at least 3/32 inches high? height of letters and numerals No. FAU.
1.8	Yes-Pass; No-FAIL Does the owner's manual set forth the recommended schedule for maintenance or
1.0	replacement?Yes-Pass No-FAIL
2.	Does the owner's manual: (S4.5.1(f))
2.1	Include a description of the vehicle's air bag system in an easily understandable format? Yes-Pass; No-FAIL
2.2	Include a statement that the vehicle is equipped with an air bag and a lap/shoulder belt at the front outboard seating positions? Yes-Pass; No-FAIL
2.3	Include a statement that the air bag is a supplemental restraint at the front outboard seating positions?
	Yes-Pass; No-FAIL
2.4	Emphasize that all occupants, including the driver, should always wear their seat belts whether or not an air bag is also provided at their seating positions to minimize the risk of severe injury or death in the event of a crash?
	Yes-Pass; No-FAIL
2.5	Provide any necessary precautions regarding the proper positioning of occupants, including children, at seating positions equipped with air bags to ensure maximum safety protection for those occupants?
0.0	Yes-Pass;No-FAIL
2.6	Explain that no objects should be placed over or near the air bag on the steering wheel or on the instrument panel, because any such objects could cause harm if the vehicle is in a crash severe enough to cause the air bag to inflate?
	Yes-Pass; No-FAIL

2.7 Is the vehicle certified to meet the requirements of S14.5, S15, S17, S19, S21, S23, and S25? (Obtain the answer to this question from the COTR.) (S4.5.1(f)(2))Yes (go to 2.7.1); __No (go to 3) 2.7.1 Explain the proper functioning of the advanced air bag system? (S4.5.1(f)(2)) Yes-Pass: No-FAIL 2.7.2 Provide a summary of the actions that may affect the proper functioning of the system? (S4.5.1(f)(2))_Yes-Pass; __No-FAIL 2.7.3 Present and explain the main components of the advanced passenger air bag system? (S4.5.1(f)(2)(i))Yes-Pass: No-FAIL Explain how the components function together as part of the advanced passenger air bag 2.7.4 system? (S4.5.1 (f)(2)(ii)) Yes-Pass; No-FAIL 2.7.5 Contain the basic requirements for proper operation, including an explanation of the actions that may affect the proper functioning of the system? (S4.5.1(f)(2)(iii)) Yes-Pass: No-FAIL 2.7.6 Is the vehicle certified to the requirements of S19.2, S21.2 or S23.2 (automatic suppression)? __Yes, continue with 2.7.6 No, go to 2.7.7 2.7.6.1 Contain a complete description of the passenger air bag suppression system installed in the vehicle, including a discussion of any suppression zone? (S4.5.1(f)(2)(iv)) Yes-Pass; No-FAIL 2.7.6.2 Discuss the telltale light, specifying its location in the vehicle and explaining when the light is illuminated? Yes-Pass; No-FAIL 2.7.7 Explain the interaction of the advanced passenger air bag system with other vehicle components, such as seat belts, seats or other components? (S4.5.1(f)(2)(v))Yes-Pass; No-FAIL 2.7.8 Summarize the expected outcomes when child restraint systems, children and small teenagers or adults are both properly and improperly positioned in the passenger seat, including cautionary advice against improper placement of child restraint systems? (S4.5.1(f)(2)(vi))Yes-Pass; No-FAIL 2.7.9 Provide information on how to contact the vehicle manufacturer concerning modifications for persons with disabilities that may affect the advanced air bag system? (S4.5.1(f)(2)(vii))Yes-Pass; No-FAIL 3. Sun Visor Air Bag Warning Label (S4.5.1 (b)) Check only one of the following: The vehicle is not certified to meet the requirements of S19. S21, and S23. (Obtain the answer to this question from the COTR.) (S4.5.1(b)(1)) Go to 3.1 and skip 3.2 and 3.3 The vehicle is certified to meet the requirements of S19, S21, and S23 before 9/1/03. (Obtain the answer to this question from the COTR.) (S4.5.1(b)(2)) Go to 3.2 and skip 3.1 and 3.3 The vehicle is certified to meet the requirements of S19, S21, and S23 on 9/1/03 or later. (Obtain the answer to this question from the COTR.) (S4.5.1(b)(3)) Go to 3.3 and skip 3.1 and 3.2

Vehicles not certified to meet the requirements of S19, S21, and S23.

3.1

3.1.1	molding into the visor material) to either side of the sun visor at each front outboard
	seating position such that it cannot be removed without destroying or defacing it?
	(\$4.5.1(b)(1))
	Driver sideYes-PassNo-FAIL
0.4.0	Passenger sideYes-PassNo-FAIL
3.1.2	Does the label conform in content to the label shown in either Figure 6a or 6b (Figure 6b
	is for vehicles with passenger air bag on-off switches), as appropriate, at each front
	outboard seating position? (S4.5.1 (b)(1)) (Vehicles without back seats may omit the
	statement: "The BACK SEAT is the SAFEST place for children." (S4.5.1(b)(1)(iv)))
	Driver sideYes-PassNo-FAIL
242	Passenger sideYes-PassNo-FAIL
3.1.3	Is the label heading area yellow with the word "WARNING" and the alert symbol in black?
	(S4.5.1 (b)(1)(i)) Driver side Yes-Pass No-FAIL
3.1.4	Passenger side Yes-Pass No-FAIL Is the message area white with black text? (S4.5.1 (b)(1)(ii))
J. 1. 4	Driver side Yes-Pass No-FAIL
	Passenger side Yes-Pass No-FAIL
3.1.5	Is the message area at least 30 cm ² ? (S4.5.1 (b)(1)(ii))
0.1.0	Driver side: Length, Width
	Passenger side: Length, Width
	Actual message areacm ²
	Driver sideYes-Pass No-FAIL
	Passenger side Yes-Pass No-FAIL
3.1.6	Is the pictogram black with a red circle and slash on a white background?
	(\$4.5.1(b)(2)(iii))
	Driver sideYes-Pass No-FAIL
	Passenger sideYes-PassNo-FAIL
3.1.7	Is the pictogram at least 30 mm in diameter? (S4.5.1 (b)(2)(iii))
	Actual diametermm
	Driver side Yes-Pass No-FAIL
	Passenger sideYes-PassNo-FAIL
3.2	Vehicles certified to meet the requirements of S19, S21, and S23 before 9/1/03.
0.04	(S4.5.1(b)(2))
3.2.1	Is the label permanently affixed (including permanent marking on the visor material or
	molding into the visor material) to either side of the sun visor at each front outboard
	seating position such that it cannot be removed without destroying or defacing the label or the sun visor? (S4.5.1 (b)(2))
	Driver side Yes-Pass No-FAIL
	Passenger side Yes-Pass No-FAIL
3.2.2	Does the label conform in content to the label shown in Figure 8 or Figure 11 at each
0.2.2	front outboard seating position? (S4.5.1(b)(2)) (Vehicles without back seats may omit
	the statement: "The BACK SEAT is the SAFEST place for children."
	(S4.5.1(b)(2)(iv)) Vehicles without back seats or the back seat is too small to
	accommodate a rear-facing child restraint may omit the statement "Never put a
	fear-facing child seat in the front." (S4.5.1(b)(2)(v)))
	Driver side Yes-Pass No-FAIL
	Passenger sideYes-PassNo-FAIL
3.2.3	Is the label heading area yellow with the word "WARNING" and the alert symbol in black?
	(S4.5.1 (b)(2)(i))
	Driver side Yes-Pass No-FAIL
	Passenger side Yes-Pass No-FAIL
3.2.4	Is the message area white with black text? (S4.5.1(b)(2)(ii))
	Driver sideYes-PassNo-FAIL
	Passenger side Yes-Pass No-FAIL

3.2.5	Is the message area at least 30 cm ² ? (S4.5.1(b)(2)(ii)) Driver side: Length, Width
	Passenger side:Length, Width
	Driver actual message areacm²
	Passenger actual message areacm²
	Driver sideYes-Pass No-FAIL Passenger side Yes-Pass No-FAIL
3.2.6	
3.2.0	Is the pictogram black on a white background? (S4.5.1(b)(2)(iii)) Driver side Yes-Pass No-FAIL
	Passenger side Yes-Pass No-FAIL
3.2.7	Is the pictogram at least 30 mm (1.2 in) in length? (S4.5.1(b)(2)(iii))
3.2.1	Driver side: Length
	Passenger side: Length
	Driver side Yes-Pass No-FAIL
	Passenger sideYes-PassNo-FAIL
3.3	Vehicles certified to meet the requirements of S19, S21, and S23 on 9/1/03 and later.
5.5	(\$4.5.1(b)(3))
3.3.1	Is the label permanently affixed (including permanent marking on the visor material or
J.J. I	molding into the visor material) to either side of the sun visor at each front outboard
	seating position such that it cannot be removed without destroying or defacing the label
	or the sun visor? (S4.5.1 (b)(3))
	Driver side Yes-Pass No-FAIL
	Passenger sideYes-PassNo-FAIL
3.3.2	Does the label conform in content to the label shown in Figure 11 at each front outboard
0.0.2	seating position? (S4.5.1(b)(2)) (Vehicles without back seats may omit the statement:
	"The BACK SEAT is the SAFEST place for children." (S4.5.1(b)(3)(iv)) Vehicles
	without back seats or the back seat is too small to accommodate a rear-facing
	child restraint may omit the statement "Never put a rear-facing child seat in the
	front." (S4.5.1(b)(3)(v)))
	Driver sideYes-Pass No-FAIL
	Passenger side Yes-Pass No-FAIL
3.3.3	Is the label heading area yellow with the word "WARNING" and the alert symbol in black?
	(S4.5.1 (b)(3)(i))
	Driver side Yes-Pass No-FAIL
	Passenger side Yes-Pass No-FAIL
3.3.4	Is the message area white with black text? (S4.5.1(b)(3)(ii))
	Driver side Yes-Pass No-FAIL
	Passenger side Yes-PassNo-FAIL
3.3.5	Is the message area at least 30 cm ² ? (S4.5.1(b)(3)(ii))
	Driver side: Length, Width
	Passenger side:Length, Width
	Driver actual message areacm²
	Passenger actual message areacm²
	Driver sideYes-PassNo-FAIL
	Passenger sideYes-PassNo-FAIL
3.3.6	Is the pictogram black on a white background? (S4.5.1(b)(3)(iii))
	Driver sideYes-PassNo-FAIL
227	Passenger sideYes-PassNo-FAIL
3.3.7	Is the pictogram at least 30 mm in length? (S4.5.1(b)(3)(iii))
	Driver side: Length
	Passenger side:Length Driver side Yes-Pass No-FAIL
	Passenger sideYes-PassNo-FAIL
	1 000011901 0100 1 00-F 000 110-F AIL

3.4	Is the same side of the sun visor that contains the air bag warning label free of other information with the exception of the air bag maintenance label and/or the rollover-warning label? (S4.5.1 (b)(5)(i))
	Driver side Yes-Pass No-FAIL
	Passenger sideYes-PassNo-FAIL
3.5	Is the sun visor free of other information about air bags or the need to wear seat belts with the exception of the air bag alert label and/or the rollover-warning label? (S4.5.1(b)(5)(ii))
	Driver side Yes-PassNo-FAIL
	Passenger sideYes-PassNo-FAIL
3.6	Does the driver side visor contain a rollover-warning label on the same side of the visor as the air bag warning label? Yes (go to 3.6.1);No (go to 4., skipping 3.6.1 through 3.6.3)
3.6.1	Are both the rollover-warning label and the air bag warning label surrounded by a continuous solid-lined border?
	Yes (go to 3.6.2 and skip 3.6.3);No (go to 3.6.3 and skip 3.6.2.)
3.6.2	Is the shortest distance from the border of the rollover label to the border of the air bag warning label at least 1 cm? (575.105 (d)(1)(iv)(B)) actual distance
	Yes-Pass No-FAIL
3.6.3	Is the shortest distance from any of the lettering or graphics on the rollover-warning label to any of the lettering or graphics of the air bag warning label at least 3 cm? (575.105(d)(1)(iv)(A))
	actual distance
	Yes-PassNo-FAIL
4.	Air Bag Alert Label (S4.5.1(c)) (A "Rollover Warning Label" or "Rollover Alert Label" may
11	be on the same side of the driver's sun visor as the "Air Bag Alert Label." 575.105(d))
4.1	Is the Sun Visor Warning Label visible when the sun visor is in the stowed position? Driver side Yes No
	Passenger sideYesNo
	If yes, for driver and passenger go to 5.
4.2	Is the air bag alert label permanently affixed (including permanent marking on the visor
T. 2	material or molding into the visor material) to the sun visor at each front outboard seating position such that it cannot be removed without destroying or defacing the label or the
	sun visor? (S4.5.1(c)) Driver side Yes-Pass No-FAIL
	Driver side Yes-Pass No-FAIL Passenger side Yes-Pass No-FAIL
4.3	Is the air bag alert label visible when the visor is in the stowed position? (S4.5.1(c))
7.5	Driver side Yes-Pass No-FAIL
	Passenger side Yes-Pass No-FAIL
4.4	Does the label conform in content to the label shown in Figure 6c? (S4.5.1(c))
	Driver side Yes-Pass No-FAIL
	Passenger side Yes-Pass No-FAIL
4.5	Is the message area black with yellow text? (S4.5.1(c)(1))
	Driver side Yes-Pass No-FAIL
	Passenger side Yes-PassNo-FAIL
4.6	Is the message area at least 20 $\overline{\text{cm}^2}$? (S4.5.1(c)(1))
	Driver side: Length, Width
	Passenger side:Length, Width
	Actual message areacm²
	Driver sideYes-PassNo-FAIL
4.7	Passenger side Yes-Pass No-FAIL Is the pictogram black with a red circle and slash on a white background? (S4.5.1(c)(2))
7.1	Driver side Yes-Pass No-FAIL
	Passenger side Yes-Pass No-FAIL
	· — —

4.8	Is the pictogram at least 20 mm in diameter? (S4.5.1(c)(2)) Driver side: diameter Passenger side:diameter
	Driver sideYes-PassNo-FAIL
	Passenger side Yes-Pass No-FAIL
5.	Label On the Dashboard
5.1	Is the vehicle certified to meet the requirements of S19, S21, and S23? (Obtain the
	answer to this question from the COTR.) (S4.5.1(e)(2))
	Yes (go to 5.1.1 and skip 5.2)
5.1.1	No (go to 5.2, skipping 5.1.1 through 5.1.6) Does the vehicle have a label on the dash or steering wheel hub? (S4.5.1(e)(2))
J. 1. I	Yes-Pass No-FAIL
5.1.2	Is the label clearly visible from all front seating positions? (S4.5.1(e)(2))
	Yes-PassNo-FAIL
5.1.3	Does the label conform in content to the label shown in Figure 9? (S4.5.1(e)(2))
	(Vehicles without back seats may omit the statement: "The back seat is the safest
	place for children." (S4.5.1(e)(2)(iii)))
5.1.4	Yes-Pass; No-Fail Is the heading area yellow with black text? (S4.5.1(e)(2)(i)
J. 1. -	Yes-Pass; No-FAIL
5.1.5	Is the message white with black text? (S4.5.1(e)(2)(ii))
	Yes-Pass;No-FAIL
5.1.6	Is the message area at least 30 cm ² ? (S4.5.1(e)(2)(ii))
	Length, Width cm ² Actual message areacm ²
5.2	Yes-Pass; No-FAIL Does the vehicle have a label on the dash or steering wheel hub? (S4.5.1(e)(1))
J.Z	Yes-PassNo-FAIL
5.2.1	Is the label clearly visible from all front seating positions? (S4.5.1(e)(1))
	Yes-PassNo-FAIL
5.2.2	Does the label conform in content to the label shown in Figure 7? (S4.5.1 (e)(1)(iii))
	(Vehicles without back seats may omit the statement: "The back seat is the safest
	place for children 12 and under." (S4.5.1(e)(1)(iii))) Yes-Pass; No-Fail
5.2.3	Is the heading area yellow with the word "WARNING" and the alert symbol in black?
5.2.5	(S4.5.1 (e)(1)(i)
	Yes-Pass; No-FAIL
5.2.4	Is the message white with black text? (S4.5.1(e)(1)(ii))
	Yes-Pass;No-FAIL
5.2.5	Is the message area at least 30 cm ² ? (S4.5.1(e)(1)(ii))
	Length, Widthcm ² Actual message areacm ²
	Actual message areacm ² Yes-Pass; No-FAIL
	100 1 000,NO 1 AIL
I certify	that I have read and performed each instruction.

Bottom Text Black Artwork Black With With Red Bullets on White Background White Background Top Text and Symbol Circle and Line Red Black With Yellow With White Background Background **DEATH or SERIOUS INJURY can occur** Children 12 and under can be killed by the air bag The BACK SEAT is the SAFEST place for children NEVER put a rear-facing child seat in the front Sit as far back as possible from the air bag ALWAYS use SEAT BELTS and CHILD RESTRAINTS

Label Outline, Vertical and Horizontal Line Black

Figure 6a. Sun Visor Label Visible When Visor is in Down

Label Outline, Vertical and Horizontal Line Black

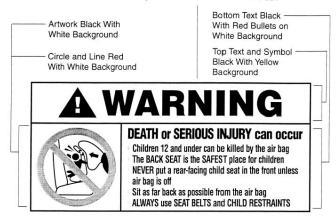


Figure 6b. Sun Visor Label Visible When Visor is in Down

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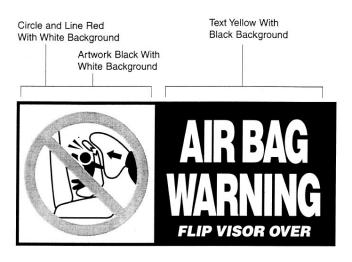


Figure 6c. Sun Visor Label Visible When Visor is in Up Position.

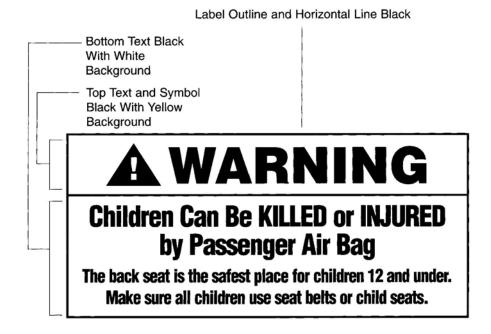


Figure 7. Removable Label on Dash.



Figure 8. Sun Visor Label Visible when Visor is in Down Position.

Label Outline, Vertical and Horizontal Lines Black

 Bottom Text Black with White Background

Top Text Black with Yellow Background

This Vehicle is Equipped with Advanced Air Bags

Even with Advanced Air Bags
Children can be killed or seriously injured by the air bag.
The back seat is the safest place for children.
Always use seat belts and child restraints.

See owner's manual for more information about air bags.

Figure 9. Removable Label on Dash.

 See owner's manual for more information about air bags Top Text Black with Yellow Background Children can be killed or seriously injured by the air bag WITH ADVANCED AIR BAGS Never put a rear-facing child seat in the front The back seat is the safest place for children Always use seat belts and child restraints Bottom Text and Artwork Black with White Background Z 3 / 3

Figure 11. Sun Visor Label Visible when Visor is in Down Position.

DATA SHEET 6

FMVSS 208 READINESS INDICATOR (S4.5.2)

NHTS	A No	Test Date:
Labora	atory: Test Technician(s):	
with a	cupant restraint system that deploys in the event of a crash readiness indicator. A totally mechanical system is exempnterpretation to Lawrence F. Henneberger on behalf of Bre	ot from this requirement. (11/8/94
1. 2.	Is the system totally mechanical? Yes	_; No
3.	Is the readiness indicator clearly visible to the driver? Yes-Pass;No-FAIL	
4.	Is a list of the elements in the occupant restraint system, readiness indicator, provided on a label or in the owner's Yes-Pass;No-FAIL	
5.	Does the vehicle have an on-off switch for the passenger _Yes (go to 6)No (this form is complete)	-
6.	Is the air bag readiness indicator off when the passenger position? Yes-Pass;No-FAIL	r air bag switch is in the off
REMA	RKS:	
I certify	y that I have read and performed each instruction.	Date

DATA SHEET 7

Passenger Air Bag Manual Cut-Off Device (S4.5.4)

NHTSA	. No Test Date:
Laborat	ory: Test Technician(s):
1.	Is the vehicle equipped with an on-off switch that deactivates the air bag installed at the right front outboard seating position? Yes, go to 2
2.	No, this sheet is complete Does the vehicle have any forward-facing rear designated seating positions? (S4.5.4(a))Yes, go to 3
3.	No, go to 4 Verification of the lack of room for a child restraint in the rear seat behind the <u>driver's seat</u> . (S4.5.4(b))
3.1	Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3) N/A – No lumbar adjustment
3.2.	Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2)
3.3	If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S16.2.10.3.1) N/A – No independent fore-aft seat cushion adjustment
3.4.	If the seat cushion height adjusts independent of the seat back, set this adjustment to the full down position. (S16.2.10.3.1) N/A – No independent seat cushion height adjustment.
3.5.	Put the seat in its full rearward position. (S16.2.10.3.1) N/A - the seat does not have a fore-aft adjustment
3.6.	If the seat height is adjustable, put it in the full down position. (S16.2.10.3.1) N/A – No seat height adjustment
	Draw a horizontal reference line on the side of the seat cushion. Using only the controls that change the seat in the fore-aft direction, mark the fore-aft seat positions. Mark the side of the seat and a reference position directly below on a part of the vehicle that does not adjust. For manual seats, move the seat forward one detent at a time and mark each detent as was done for the full rearward position. For power seats, mark only the full rearward, middle, and full forward positions. Label three of the positions with the following: F for full forward, M for mid-position (if there is no mid position, label the closest adjustment position to the rear of the mid-point), and R for full rearward. N/A - The seat does not have a fore-aft adjustment. Using only the controls that change the seat in the fore-aft direction, place the seat in the full rearward position and then place the seat in the middle fore-aft position. (S8.1.2) N/A - The seat does not have fore-aft adjustment. Mid position If there is no mid position, put the seat in the closest adjustment position to the rear of the
	midpoint. Describe the location of the seat:
3.10.	If seat adjustments, other than fore-aft, are present and the horizontal reference line is no longer horizontal, use those adjustments to maintain the reference line as closely as possible to the horizontal. N/A – No adjustments Angle of reference line as tested

3.11.	The sea	at back angle, if adjustable, is set at the manufacturer's nominal design riding
		for a 50th percentile adult male in the manner specified by the manufacturer.
		.1 (b) and S8.1.3)
		 No seat back angle adjustment
		cturer's design seat back angle
		seat back angle
3.12		river seat a bucket seat?
		go to 3.12.1 and skip 3.12.2.
		go to 3.12.2 and skip 3.12.1.
3.12.		Bucket seats:
3.12.	1.1	Locate and mark a vertical Plane B through the longitudinal centerline of the seat
		driver's seat cushion. (S22.2.1.3) The longitudinal centerline of a bucket seat
		cushion is determined at the widest part of the seat cushion. Measure
		perpendicular to the longitudinal centerline of the vehicle.
		Record the width of the seat.
3.12.	1.2	Record the distance from the edge of the seat to Plane B.
3.12.	1.2	Locate the longitudinal horizontal line in plane B that is tangent to the highest point of the rear seat cushion behind the driver's seat. Measure along this line
		from the front of the seat back of the rear seat to the rear of the seat back of the
		driver's seat.
		mm distance
		less than 720 mm – Pass
		more than 720 mm – FAIL
		Go to 4
3.12.	2	Bench seats (including split bench seats):
3.12.		Locate and mark a vertical Plane B through the center of the steering wheel
		parallel to the vehicle longitudinal centerline.
3.12.	2.2	Locate the longitudinal horizontal line in plane B that is tangent to the highest
		point of the rear seat cushion. Measure along this line from the front of the seat
		back of the rear seat to the rear of the seat back of the front seat.
		mm distance
		less than 720 mm – Pass
		more than 720 mm - FAIL
		Go to 4
4.		ne device turn the air bag on and off using the vehicle's ignition key? (S4.5.4.2)
		- Pass
_		FAIL
5.		n-off device separate from the ignition switch? (S4.5.4.2)
		- Pass FAIL
6		a telltale light that comes on when the passenger air bag is turned off? (S4.5.4.2)
6.		- Pass
		FAIL
7.		light (S4.5.4.3)
		ght yellow? S4.5.4.3(a))
		- Pass
		FAIL
7.2		words "PASSENGER AIR BAG OFF" (S4.5.4.3(b))
	on the t	
		- Pass, go to 7.3
		go to 7.2.2
7.2.2		5 mm of the telltale?mm from the edge of the telltale light
		- Pass
		FAIL

7.3	Does the telltale remain illuminated while the air bag is turned off? (S4.5.4.3c)) (Leave the air bag off for 5 minutes.) Yes – Pass No – FAIL		
7.4	Is the telltale illuminated while the air bag is turned on? (S4.5.4.3(d)) Yes - FAIL _No - Pass		
7.5	Is the telltale combined with the air bag readiness indicator? (S4.5.3(e)) Yes - FAIL No - Pass		
8. 8.1	Owner's manual Does the owner's manual contain complete instructions on the operation of the on-off switch? (S4.5.4.4(a)) Yes - Pass No - FAIL		
8.2	Does the owner's manu	of the following risk groups is of (4.4(b)) there is no back seat the rear seat is too small to ac	on-off switch should only be used occupying the right front passenger commodate a child restraint at must be monitored constantly
	Children aged 1 to 12:	there is no back seat space is not always available	•
	Medical condition:	medical risk causes special risgreater risk for harm than with	sk for passenger
8.3	Yes - Pass No - FAIL Does the owner's manu on-off switch at other tin Yes - Pass No - FAIL		safety consequences of using the
I certify	that I have read and pe	rformed each instruction.	 Date

DATA SHEET 8

LAP BELT LOCKABILITY

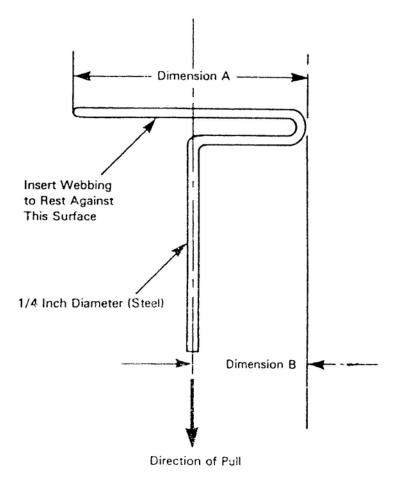
Passenger cars, trucks, buses, and multipurpose passenger vehicles with a GVWR of 10,000 pounds or less. (S7.1.1.5)

Complete one of these forms for **each** designated seating position that can be adjusted to forward-facing or that is a forward-facing seat, other than the driver's seat (S7.1.1.5(a), <u>and</u> that has seat belt retractors that are not solely automatic locking retractors. (S7.1.1.5(c))

NHISA	A No lest Date:
Labora	tory: Test Technician(s):
DESIG	NATED SEATING POSITION:
	No retractor is at this positionThe retractor is an automatic locking retractor ONLY
1.	Record test fore-aft seat position(S7.1.1.5 (c)(1))
2.	(Any position is acceptable.) Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does NOT have to be attached by the vehicle user to the seat belt webbing, retractor, or any other part of the vehicle.
3.	(S7.1.1.5 (a))Yes-Pass;No-FAIL Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does NOT require inverting, twisting or deforming of the belt webbing. (S7.1.1.5 (a))
4. 5. 6. 7.	Yes-Pass; No-FAIL Buckle the seat belt. (S7.1.1.5(c)(1)) Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2)) Locate a reference point B on the attachment hardware or retractor assembly at the other end of the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2)) Does the vehicle user need to take some action to activate the locking feature on the lap belt portion of the seat belt in any forward-facing seat or seat that can be adjusted to
7.1	forward-facing? Yes;No
8.	Yes-Pass; No-FAIL Adjust the lap belt or lap belt portion of the seat belt assembly according to any procedures recommended in the vehicle owner's manual to activate any locking feature
9.	so that the webbing between points A and B is at the maximum length allowed by the belt system. (S7.1.1.5(c)(2) & S7.1.1.5(c)(1)) Measure and record the distance between points A and B along the longitudinal centerline of the webbing for the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2))
10.	Measured distance between A and B inches Readjust the belt system so that the webbing between points A and B is at any length that is 5 inches or more shorter than the maximum length of the webbing. (S7.1.1.5(c)(3))

11. 12.	To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4)) Measured force application angle (spec. 5 - 15 degrees) Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S7.1.1.5(c)(4)) Measured distance between A and B inches Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain
	the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5)) Record onset ratelb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5)) Measured distance between A and B inches (S7.1.1.5(c)(6))
14.	Subtract the measurement in 13 from the measurement in 12. Is the difference 2 inches or less? (S7.1.1.5(c)(7)) 13-12=inches;Yes-Pass;No-FAIL
15.	Subtract the measurement in 9 from the measurement in 13. Is the difference 3 inches or more? (S7.1.1.5(c)(8)) 9-13=inches;Yes-Pass;No-FAIL
REMA	RKS:
Loortifi	that I have read and performed each instruction. Date
i cerniy	that Thave read and performed each instruction.

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Dimension A - Width of Webbing Plus 1/2 Inch

Dimension B - 1/2 of Dimension A

Figure 5. - Webbing Tension Pull Device

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DATA SHEET 9

FMVSS 208 SEAT BELT WARNING SYSTEM CHECK (S7.3)

NHTSA	A No Test Date:
Labora	tory: Test Technician(s):
1.	The occupant is in the driver's seat.
2.	The seat belt is in the stowed position.
3.	The key is in the "on" or "start" position.
1. 2. 3. 4.	The time duration of the audible signal beginning with key "on" or "start" is seconds.
5.	The occupant is in the driver's seat.
6.	The seat belt is in the stowed position.
7.	The key is in the "on" or "start'" position.
5. 6. 7. 8.	The time duration of the warning light beginning with key "on" or "start" is seconds.
9.	The occupant is in the driver's seat.
10.	The seat belt is in the latched position and with at least 4 inches of belt webbing extended.
11.	The key is in the "on" or "start" position.
12.	The time duration of the audible signal beginning with key "on" or "start" is seconds.
13.	The occupant is in the driver's seat.
14.	The seat belt is in the latched position and with at least 4 inches of belt webbing extended.
15.	The key is in the "on" or "start" position.
16.	The time duration of the warning light beginning with key "on" or "start" is seconds.
17.	Complete the following table with the data from 4, 8, 12 and 16 to determine which option is used

		Warning light	Warning light specification	Audible signal	Audible signal specification*
S7.3 (a)(1)	Belt latched & Key on or start	Item 16	0 seconds*	Item 12	0 seconds**
	Belt stowed & Key on or start	Item 8	60 seconds minimum	Item 4	4 to 8 seconds
S7.3 (a)(2)	Belt latched & Key on or start	Item 16	4 to 8 seconds	Item 12	0 seconds**
	Belt stowed & Key on or start	Item 8	4 to 8 seconds	Item 4	4 to 8 seconds

^{* 49} USCS @ 30124 does NOT allow an audible signal to operate for more than 8 seconds.

** 0 seconds means the light or audible signal are NOT permitted to operate under these conditions. See 7/12/00 interpretation to Patrick Raher of Hogan and Hartson

16.	The seat belt warning system meets the requirements of (manufacturers may comply with
	either section)
	S7.3 (a)(1)
	S7.3 (a)(2)
	FAIL - Does NOT meet the requirements of either option
19.	Note wording of visual warning: (S7.3(a)(1) and S7.3(a)(2))
	Fasten Seat Belts
	Fasten Belts
	Symbol 101
	FAIL – Does not use any of the above wording or symbol
Loortifu	, that I have read and performed each instruction.
i ceruiv	that I have read and performed each instruction. Date



DATA SHEET 10

BELT CONTACT FORCE (S7.4.3)

NHTSA	SA No	Test Date:
Labora	ratory: Test	Technician(s):
DESIG	GNATED SEATING POSITION:	
	poard designated seating positions in pas	e in walk-in van-type vehicles and those at front ssenger cars. Complete a form for each applicable eat belt.
1.	Does the vehicle incorporate a webbiYes (this form is complete)	
3.	No (continue with this check shee Position the seat's adjustable lumbar retracted or deflated adjustment posit	supports so that the lumbar support is in its lowest,
4.	N/A – No lumbar adjustment	eat that provide additional support so that they are
5.	N/A – No additional support adjust	ment ft, independent of the seat back, set this adjustment
6.	N/A – No independent fore-aft sea	
7.	N/A – No independent seat cushio Put the seat in its full rearward positio N/A - the seat does not have a force	n. (S16.2.10.3.1)
8.	If the seat height is adjustable, put it iN/A – No seat height adjustment	n the full down position. (S16.2.10.3.1)
9 10.	seat positions. Mark the side of the s of the vehicle that does not adjust. For at a time and mark each detent as was seats, mark only the full rearward, mich positions with the following: F for full following:	ne seat in the fore-aft direction, mark the fore-aft eat and a reference position directly below on a part or manual seats, move the seat forward one detent as done for the full rearward position. For power ddle, and full forward positions. Label three of the forward, M for mid-position (if there is no mid position to the rear of the mid-point), and R for full
11.	 Using only the controls that change the full rearward position and then place to (S8.1.2) 	ne seat in the fore-aft direction, place the seat in the the seat in the middle fore-aft position for this test. Sition, put the seat in the closest adjustment position
12.		t are present and the horizontal reference line is no ents to maintain the reference line as closely as 3.2.1)

13.	The seat back angle, it adjustable, is set at the manufacturer's necessition for a 50th persontile adult male in the manner appointed	
	position for a 50th percentile adult male in the manner specified	by the manufacturer.
	(\$4.5.4.1 (b) and \$8.1.3)	
	N/A – No seat back angle adjustment	
	Manufacturer's design seat back angle	
4.4	Tested seat back angle	and the admirant to the
14.	Position the test dummies according to dummy position placeme	ent instructions in
	Appendix B and include the positioning check sheets.	
15.	Fasten the seat belt latch.	
16.	Pull either 12 inches of belt webbing or the maximum available a	
	whichever is less, from the retractor and then release it, allowing	the belt webbing to
	return to the dummy's chest.	
17.	Locate the point where the centerline of the upper torso belt web	
	midsagittal line on the dummy's chest. At that point pull the belt	
	from the dummy's chest and release until it is within one inch fro	m the dummy's chest.
	(S10.8) Using a force measuring gage with a full scale range of	no more than 1.5
	pounds, measure the contact force perpendicular to the dummy's	s chest exerted by the
	belt webbing.	•
	Contact force lb.	
	0.0 to 0.7 pounds - Pass	
	greater than 0.7 pounds - FAIL	
Loortify	that I have read and performed each instruction.	Date
Certify	that Thave read and performed each instruction.	Date
	4	_
	←	→

DATA SHEET 11

LATCHPLATE ACCESS (S7.4.4)

NHTSA	No Test Date:
Labora	tory: Test Technician(s):
DESIG	NATED SEATING POSITION:
	front outboard seat belts other than those in walk-in van-type vehicles and those at front designated seating positions in passenger cars. Complete a form for each applicable lt.
1.	Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (8.1.3)
2.	N/A – No lumbar adjustment Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2) N/A – No additional support adjustment
3.	If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S16.2.10.3.1) N/A – No independent fore-aft seat cushion adjustment
4.	If the seat cushion height adjusts independent of the seat back, set this adjustment to the full down position. (S16.2.10.3.1) N/A – No independent seat cushion height adjustment.
5.	Put the seat in its full rearward position. (S16.2.10.3.1) N/A - the seat does not have a fore-aft adjustment
6.	If the seat height is adjustable, put it in the full down position. (S16.2.10.3.1) N/A – No seat height adjustment
7 8.	Draw a horizontal reference line on the side of the seat cushion Using only the controls that change the seat in the fore-aft direction, mark the fore-aft
	seat positions. Mark the side of the seat and a reference position directly below on a part of the vehicle that does not adjust. For manual seats, move the seat forward one detent at a time and mark each detent as was done for the full rearward position. For power seats, mark only the full rearward, middle, and full forward positions. Label three of the positions with the following: F for full forward, M for mid-position (if there is no mid position, label the closest adjustment position to the rear of the mid-point), and R for full rearward.
9.	N/A - The seat does not have a fore-aft adjustment. Using only the controls that change the seat in the fore-aft direction, place the seat in the
	full rearward position and then place the seat in the forwardmost fore-aft position for this test. (S10.7)
10.	If seat adjustments, other than fore-aft, are present and the horizontal reference line is no longer horizontal, use those adjustments to maintain the reference line as closely as possible to the horizontal. N/A – No adjustments Reference line angle as tested

11.	The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer.
	(S4.5.4.1 (b) and S8.1.3)
	N/A – No seat back angle adjustment
	Manufacturer's design seat back angle
	Tested seat back angle
12.	Position the test dummy using the procedures in Appendix A. (Some modifications to the
	positioning procedure may need to be made because the seat is in its forward most
	position. Note on the Appendix A positioning check sheet any deviations necessary to
	position the Part 572, Subpart E dummy.) Include the positioning check sheet with this
	form.
13.	Position the adjustable seat belt anchorage in the manufacturer's nominal design position
	for a 50 th percentile adult male occupant.
14.	Attach the inboard reach string to the base of the head following the instructions on
	Figure 3.
14.	Attach the outboard reach string to the torso sheath following the instructions on Figure 3.
16.	Place the latch plate in the stowed position.
17.	Extend inboard reach string in front of the dummy and then backward and outboard to the
	latch plate to generate an arc of the reach envelope of the test dummy's arms. Is the
	latch plate within the reach envelope?
40	Yes - PassNO
18.	Extend outboard reach string in front of the dummy and then backward and outboard to
	the latch plate to generate an arc of the reach envelope of the test dummy's arms. Is the
	latch plate within the reach envelope? Yes - Pass NO
19.	Is the latch plate within the inboard (item 17) or outboard (item 18) reach envelope?
13.	Yes - Pass NO - FAIL
20.	Using the clearance test block, specified in Figure 4, is there sufficient clearance between
	the vehicle seat and the side of vehicle interior to allow the test block to move unhindered
	to the latch plate or buckle?
	Yes - Pass NO - FAIL
	
certify	that I have read and performed each instruction. Date

TP208-12

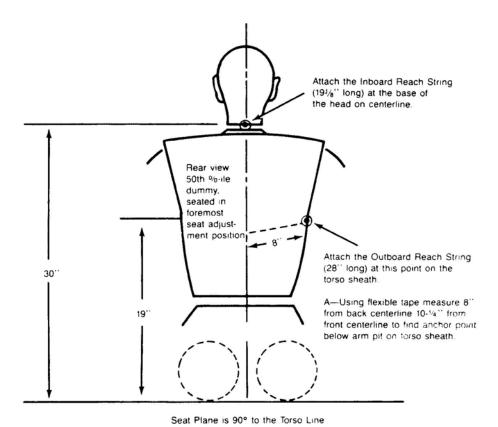


Figure 3. Location of Anchoring Points for Latchplate Reach Limiting Chains or Strings to Test for Latchplate Accessibility Using Subpart E Test Device

TP208-12

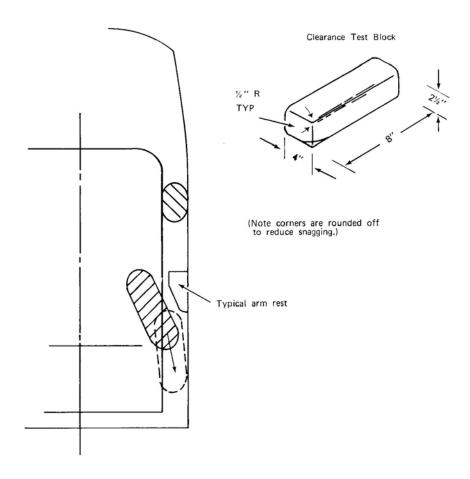


Figure 4—USE OF CLEARANCE TEST BLOCK TO DETERMINE HAND/ARM ACCESS

DATA SHEET 12 SEAT BELT RETRACTION (S7.4.5)

NHTSA	A No Test Date:
Labora	tory: Test Technician(s):
DESIG	NATED SEATING POSITION:
GVWR	<u>:</u>
	all front outboard seat belts, except those in walk-in van-type vehicles and those at front ard designated seating positions in passenger cars. Complete a form for each applicable seat belt.
1.	Is the vehicle a passenger car or walk-in van-type vehicle? Yes, this form is complete
2.	No Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3) N/A – No lumbar adjustment
3.	Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2) N/A – No additional support adjustment
4.	If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position.) (S16.2.10.3.1) N/A – No independent fore-aft seat cushion adjustment
5.	If the seat cushion height adjusts independent of the seat back, set this adjustment to the full down position. (S16.2.10.3.1) N/A – No independent seat cushion height adjustment.
6.	Put the seat in its full rearward position. N/A - the seat does not have a fore-aft adjustment
7.	If the seat height is adjustable, put it in the full down position. (S8.1.2) N/A – No seat height adjustment
7 8.	Draw a horizontal line on the side of the seat cushion. Using only the controls that change the seat in the fore-aft direction, mark the fore-aft seat positions. Mark the side of the seat and a reference position directly below on a part of the vehicle that does not adjust. For manual seats, move the seat forward one detent at a time and mark each detent as was done for the full rearward position. For power seats, mark only the full rearward, middle, and full forward positions. Label three of the positions with the following: F for full forward, M for mid-position (if there is no mid position, label the closest adjustment position to the rear of the mid-point), and R for full rearward.
9.	N/A - The seat does not have a fore-aft adjustment. Using only the controls that change the seat in the fore-aft direction, place the seat in the middle fore-aft position. (S8.1.2) If there is no mid position, put the seat in the closest adjustment position to the rear of the midpoint. Describe the location of the seat:
10.	If seat adjustments, other than fore-aft, are present and the reference line is no longer horizontal, use those adjustments to maintain the reference line as closely as possible to the horizontal. (S16.2.10.3.2) N/A – No seat adjustments Reference angle as tested

11.	The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S8.1.3)
	N/A – No seat back angle adjustment
	Manufacturer's design seat back angle
	Tested seat back angle
12.	If adjustable, set the head restraint at the full up and full forward position. (S8.1.3) Any adjustment of the head restraint shall be used to position it full forward. For example, if it rotates, rotate it such that the head restraint extends as far forward as possible.
13.	N/A – No head restraint adjustment Place any adjustable seat belt anchorages at the vehicle manufacturer's nominal design position for a 50th percentile adult male occupant (S8.1.3) N/A – No adjustable upper seat belt anchorage
	Manufacturer's specified anchorage position.
	Tested anchorage position
14.	Is the driver seat a bucket seat? Yes, go to 14.1 and skip 14.2.
	No, go to 14.2 and skip 14.1.
14.1	Bucket seats:
	Locate and mark a vertical Plane B through the longitudinal centerline of the seat. The longitudinal centerline of a bucket seat cushion is determined at the widest part of the seat cushion. Measure perpendicular to the longitudinal centerline of the vehicle.
	Record the width of the seat.
	Record the distance from the edge of the seat to Plane B
14.2	Bench seats (including split bench seats):
	Driver seat: Locate and mark a vertical Plane B through the center of the steering
	wheel parallel to the vehicle longitudinal centerline.
	Passenger seat: Locate and mark a vertical longitudinal Plane B on the seat that is the
	same distance from the longitudinal centerline of the vehicle as the center of the steering
	wheel.
	Distance from the vehicle centerline to the center of the steering wheel
	Distance from the vehicle centerline to Plane B
15.	Stow outboard armrests that are capable of being stowed. (\$7.4.5)
16.	Remove the arms of a Subpart E dummy and place it in the seat such that the midsagittal
	plane is coincident with Plane B and the upper torso rests against the seat back.
	(S10.4.1.1 & S10.4.1.2)
17.	Rest the thighs on the seat cushion.
18.	Position the H-point of the dummy within 0.5 inch of the vertical dimension and 0.5 inch of the horizontal dimension of a point 0.25 inch below the H-point determined by using the equipment and procedures specified in SAE J826 (APR 1980). (S10.4.2.1) Then measure the pelvic angle with respect to the horizontal using the pelvic angle gage. Adjust the dummy position until these three measurements are within the specifications.
	(S10.4.2.1 and S10.4.2.2) horizontal inches from the point 0.25 below the determined H-point (0.5 inch max.)
	(\$10.4.2.1) vertical inches from the point 0.25 below the determined H-point (0.5 inch max.)
	(\$10.4.2.1)
	pelvic angle (20° to 25°)
	vertical inches from the point 0.25 below the determined H-point (0.5 inch max.)
	(\$10.4.2.1)
10	pelvic angle (20° to 25°) (\$10.4.2.2)
19.	Set the distance between the outboard knee clevis flange surfaces at 10.6 inches.
20	measured distance (10.6 inches) (\$10.5)
20.	To the extent practicable keep the thighs and the legs in a vertical plane (\$10.5) and rest
21.	the thighs on the seat cushion while resting the feet on the floorpan or toe board. Fasten the seat belt around the dummy.

22.	Remove all slack from the lap belt portion. (S10.9)
23.	Pull the upper torso webbing out of the retractor and allow it to retract; repeat this four
	times. (S10.9)
24.	Apply a 2 to 4 pound tension load to the lap belt. (S10.9)
	pound load applied
25.	Is the belt system equipped with a tension relieving device?
	Yes, continue
	No, go to 26
25.1	Introduce the maximum amount of slack into the upper torso bet that is recommended by
	the vehicle manufacturer in the vehicle owner's manual. (S10.9). Go to 25.
26.	Check the statement that applies to this test vehicle:
26.1	The torso and lap belt webbing of the seat belt system automatically retracts to a stowed
	position when the adjacent vehicle door is in an open position and the seat belt latch
	plate is releasedPass
26.2	The torso and lap belt webbing of the seat belt system automatically retracts when the
	seat belt latch plate is releasedPass
26.3	Neither A or B apply FAIL
27.	With the webbing and hardware in the stowed position are the webbing and hardware
	prevented from being pinched when the door is closed?
	Yes - Pass NO - FAIL
28.	If this test vehicle has an open body (without doors) and has a belt system with a
	tension-relieving device, does the belt system fully retract when the tension-relieving
	device is deactivated?
	N/A
	Yes – Pass NO – FAIL
1 415	that the constant and a set was the constant and the cons
certify	that I have read and performed each instruction. Date

DATA SHEET 13SEAT BELT GUIDES AND HARDWARE (S7.4.6)

NHTS	A No		Test Date:
Laboratory:		Test Technician(s):	
DESIG	GNATED SEATING POSITION: _		
Test	seat belts except those in walk-in seating positions in passenger c		d those at front outboard designated n for each applicable seat belt.
_1.	(S7.4.6.1 (b))Yes; this form is complete	that the seat back se	erves a function other than seating?
2.	No; got to 2 Is the seat removable? (S7.4.6Yes; this form is completeNo; got to 3	1(b))	
3.			pied by the seat can be used for a
4.		s through the seat cu	shion or between the seat cushion
5.	Does one of the following three webbing, stay on top of or above	re the seat cushion ur hardware is intention	atch plate, the buckle, or the seat belt nder normal conditions (i.e., nally pushed behind the seat by a
<u></u> 6.	Identify the part(s) on top or about seat belt latch plate;buck Are the remaining two seat beltYes - PassNO - FAIL	le;seat belt webbi	
_7.	The buckle and latch plate do n		guides or conduits provided and fall d or, if the belt is nonretractable, the
_8.	The buckle and latch plate do n		guides or conduits provided and fall ion to which it is designed to be
<u> </u> 9.	The buckle and latch plate do n	back, if foldable, is fol	guides or conduits provided and fall lded forward as far as possible and
10.	Is the inboard receptacle end or	cessible with the cent	bly, installed in the front outboard ter armrest in any position to which it I.6.2)
I certify	y that I have read and performed	each instruction.	Date

DATA SHEET 14MARKING OF REFERENCE POINTS FOR VARIOUS TEST POSITIONS AND POINTS

NHTSA No.		Test Date:						
Laborat	tory: T	est Technician(s):						
Driver Designated Seating Position								
1.1								
1.2								
1.3	Mark a point (seat cushion referen	nce point) on the side of the seat cushion that is m the front edge of the seat cushion.						
1.4 1.5	Draw a line (seat cushion reference	ce line) through the seat cushion reference point. rily move the seat in the fore-aft direction, move the						
1.6	If the seat cushion adjusts fore-aff	i, independent of the seat back, use only the controls on in the fore-aft direction to move the seat cushion						
1.7	N/A – No independent fore-aft seat cushion adjustment							
1.8	those which primarily move the se	ight is adjustable, use any part of any control other than eat or seat cushion fore-aft, to put the seat cushion on with the seat cushion reference line angle at the						
1.9	mid-angle found in 1.7N/A – No seat height adjustment							
1.10	Using only the controls that prima future reference the fore-aft seat prindication when the seat is at a part forward one detent at a time and prearmost, middle, and foremost per primary that is the control of the co	rily move the seat in the fore-aft direction, mark for positions. Mark each position so that there is a visual articular position. For manual seats, move the seat mark each detent. For power seats, mark only the positions. Label three of the positions with the following: (if there is no mid-position, label the closest adjustment and R for rearmost						
1.11		y move the seat in the fore-aft direction to place the						
1.12	Using any controls, other than the cushion in the fore-aft direction, file							
1.13	Using only the controls that prima direction, place the seat in the mid	rily move the seat and/or seat cushion in the fore-aft d-fore-aft position.						

1.14	Using any controls, other than the controls that primarily move the seat in the fore-aft direction, find and visually mark for future reference the maximum, minimum, and middle height of the seat cushion reference point with the seat cushion reference line at the
1.15	mid-angle determined in 1.7. Using only the controls that change the seat in the fore-aft direction, place the seat in the
1.16	foremost position. Using any controls, other than the controls that primarily move the seat in the fore-aft
	direction, find and visually mark for future reference the maximum, minimum, and middle height of the seat cushion reference point with the seat cushion reference line at the
1 17	mid-angle determined in 1.7.
'	Visually mark for future reference the seat back angle, if adjustable, at the manufacturer's nominal design riding position for a 50th percentile adult male in the
	manner specified by the manufacturer.
	N/A – No seat back angle adjustment
	Manufacturer's design seat back angle
1.18.	Is the seat a bucket seat?
	Yes, go to 1.18.1 and skip 1.18.2
	No, go to 1.18.2 and skip 1.18.1
	1.18.1 Bucket seats:
	Locate and mark for future reference the longitudinal centerline of the seat
	cushion. The longitudinal centerline of a bucket seat cushion is determined at
	the widest part of the seat cushion. Measure perpendicular to the longitudinal
	centerline of the vehicle. (S16.3.1.10)
	Record the width of the seat cushion.
	One half the width of the seat cushion is
	Record the distance from the edge of the seat cushion to the seat mark
	1.18.2 Bench seats:
	Locate and mark for future reference the longitudinal line on the seat cushion
	that mark s the longitudinal vertical plane through the centerline of the steering
	wheel.
2. Pas	ssenger Designated Seating Position
2.1	Is the seat adjustable independent of the driver seating position?
	Yes-go to 2.2
	No-go to 2.18
2.2	Position the seat's adjustable lumbar supports so that the lumbar supports are in the
	lowest, retracted or deflated adjustment positions. (S16.2.10.1, S20.1.9.1, S22.1.7.1)
	N/A – No lumbar adjustment
2.3	Position any adjustable parts of the seat that provide additional support so that they are
	in the lowest or most open adjustment position. (S16.2.10.2, S20.1.9.2, S22.1.7.2)
2.4	N/A – No additional support adjustment Mark a point (seat cushion reference point) on the side of the seat cushion that is
2.4	between 150 mm and 250 mm from the front edge of the seat cushion.
2.5	Draw a line (seat cushion reference line) through the seat cushion reference point.
2.6	Using only the controls that primarily move the seat in the fore-aft direction, move the
	seat cushion reference point to the rearmost position.
2.7	If the seat cushion adjusts fore-aft, independent of the seat back, use only the controls
	that primarily move the seat cushion in the fore-aft direction to move the seat cushion
	reference point to the rearmost position. (S16.2.10.3, S20.1.9.3, S22.1.7.3)
	N/A – No independent fore-aft seat cushion adjustment
2.8	Using any part of any control, other than the parts just used for fore-aft positioning,
	determine the range of angles of the seat cushion reference line and set the seat cushion
	reference line at the mid-angle.
	Maximum angle
	Minimum angle
	Mid-angle

	_2.9	If the seat and/or seat cushion height is adjustable, use any part of any control other than
		those which primarily move the seat or seat cushion fore-aft, to put the seat cushion
		reference point in its lowest position with the seat cushion reference line angle at the
		mid-range angle.
		N/A – No seat height adjustment
	_2.10	Using only the controls that primarily move the seat and/or seat cushion in the fore-aft
		direction, verify the seat is in the rearmost position.
	_2.11	Using only the controls that primarily move the seat in the fore-aft direction, mark for
		future reference the fore-aft seat positions. Mark each position so that there is a visual
		indication when the seat is at a particular position. For manual seats, move the seat
		forward one detent at a time and mark each detent. For power seats, mark only the
		rearmost, middle, and foremost positions. Label three of the positions with the following:
		F for foremost, M for mid-position (if there is no mid-position, label the closest adjustment
		position to the rear of the mid-point), and R for rearmost.
	2.12	Using only the controls that primarily move the seat in the fore-aft direction, place the
	0.40	seat in the rearmost position.
	_2.13	Using any controls, other than the controls that primarily move the seat in the fore-aft direction, find and visually mark for future reference the maximum, minimum, and middle
		height of the seat cushion reference point with the seat cushion reference line at the
		mid-angle determined in 2.8.
		N/A – No seat height adjustment. Go to 2.18
	2 14	Using only the controls that primarily move the seat in the fore-aft direction, place the
_		seat in the mid-fore-aft position.
	2.15	Using any controls, other than the controls that primarily move the seat in the fore-aft
		direction, find and visually mark for future reference the maximum, minimum, and middle
		height of the seat cushion reference point with the seat cushion reference line at the
		mid-angle determined in 2.8.
	2.16	Using only the controls that change the seat in the fore-aft direction, place the seat in the
		foremost position.
	_2.17	Using any controls, other than the controls that primarily move the seat in the fore-aft
		direction, find and visually mark for future reference the maximum, minimum, and middle
		height of the seat cushion reference point with the seat cushion reference line at the
		mid-angle determined in 2.8.
	_2.18.	Visually mark for future reference the seat back angle, if adjustable, at the
		manufacturer's nominal design riding position for a 50th percentile adult male in the
		manner specified by the manufacturer.
		N/A – No seat back angle adjustment
		N/A – The seat back angle adjustment is controlled by the setting of the driver seat
		back angle. Manufacturer's design seat back angle
		Actual seat back angle

2.19.	Is the s	eat a bucket seat?
	Yes,	go to 2.19.1 and skip 2.19.2
	No, c	po to 2.19.2 and skip 2.19.1
		Bucket seats:
		Locate and mark for future reference the longitudinal centerline of the seat
		cushion. (S20.2.1.3, S22.2.1.3) The longitudinal centerline of a bucket seat
		cushion is determined at the widest part of the seat cushion. Measure
		perpendicular to the longitudinal centerline of the vehicle. (S20.1.10)
		Record the width of the seat cushion.
		One half the width of the seat cushion is
		Record the distance from the edge of the seat cushion to the longitudinal
		centerline of the seat cushion. (The vertical plane through this longitudinal
		centerline is Plane B for suppression.)
	2 19 2	Bench seats:
		Locate and mark for future reference the longitudinal centerline of the passenger
		seat cushion. The longitudinal centerline is the same distance from the
		longitudinal centerline of the vehicle as the center of the steering wheel.
		•
		(\$20.2.1.3, \$22.2.1.3)
		Record the distance from the longitudinal centerline of the vehicle to the center of
		the steering wheel.
		Record the distance from the longitudinal centerline of the vehicle to the
		longitudinal centerline of the seat cushion. (The vertical plane through this
		longitudinal centerline is Plane B for suppression.)
	ad Restr	
		cle contains automatic head restraints.
		e is no head restraint adjustment
3.1	Left out	board
3.1.1	Adjust t	he head restraint to its lowest position. (S16.3.4.2)
3.1.2	Any adj	ustment of the head restraint shall be used to position it full forward. For
	example	e, if it rotates, rotate it such that the head restraint extends as far forward as
	possible	e. Mark the foremost position.
3.1.3	Measur	e the vertical distance from the top most point of the head restraint to the bottom
	most po	pint. Locate and mark a horizontal plane through the midpoint of this distance.
	·	Vertical height of head restraint mm
		Mid-point height mm
3.2	Right or	
		he head restraint to its lowest position. (S16.3.4.2)
		ustment of the head restraint shall be used to position it full forward. For
		e, if it rotates, rotate it such that the head restraint extends as far forward as
		e. Mark the foremost position.
323		e the vertical distance from the top most point of the head restraint to the bottom
0.2.0		bint. Locate and mark a horizontal plane through the midpoint of this distance.
	ποσι ρι	Vertical height of head restraint mm
		Mid-point height mm
4 Cto	orina \//	. • —
	ering WI	
4.1		teering wheel adjustable up and down and/or in and out?
		- go to 4.2
4.0		this form is complete
4.2		d mark for future reference each up and down position. Label three of the
		s with the following: H for highest, M for mid-position (if there is no mid-position,
		e next lowest adjustment position), and L for lowest.
		- steering wheel is not adjustable up and down
4.3	Find an	d mark for future references each in and out position. Label three of the positions
	with the	following: F for foremost, M for mid-position (if there is no mid-position, label the
		armost adjustment position), and R for rearmost.
		- steering wheel is not adjustable in and out.
		-

- 5. Driver Low Risk Deployment -
 - N/A no low risk deployment tests scheduled
- __5.1 Position the steering wheel so the front wheels are in the straight-ahead position. (S26.2.1)
- __5.2 Position any adjustable parts of the steering controls to the mid-position as determined in item 3 above. If a mid-position adjustment is not achievable, position the controls to the next lowest detent position. (S26.2.1)
- __5.3 Locate the vertical plane parallel to the vehicle longitudinal centerline through the geometric center of the opening through which the driver air bag deploys into the occupant compartment. This is referred to as "Plane E." (Check determination method below.) (S26.2.2)
 - Plane E determined using manufacturer's information supplied by the COTR. (Include manufacturer's information in the test report.)
 - Plane E determined by test lab personnel and approved by the COTR. (Include supporting documentation in the test report.)

"Plane E" Measurement	Measured	Specified	Verify Measured equals Specified +/- 6mm
Ey (mm)			

__5.4 Locate the horizontal plane through the highest point of the air bag module cover. This is referred to as "Plane F." (Check determination method below.) (S26.2.6)

 $\underline{\hspace{0.3cm}} \text{Plane F determined using manufacturer's information supplied by the COTR} \; .$

(Include manufacturer's information in the test report.)

OR

__Plane F determined by test lab personnel and approved by the COTR. (Include supporting documentation in the test report.)

"Plane F" Measurement	Measured	Specified	Verify Measured equals Specified +/- 6mm
Fz (mm)			

- 6. Passenger Low Risk Deployment Planes C and D
 - N/A no low risk deployment tests scheduled
- Locate the horizontal plane through the geometric center of the opening through which the right front air bag deploys into the occupant compartment. This is referred to as "Plane C." (Check location method below.) (S22.4.1.3)
 - __Plane C located using manufacturer's information supplied by the COTR. (Include manufacturer's information in the test report.)

OR

__Plane C located by test lab personnel and approved by the COTR. (Include supporting documentation in the test report.)

"Plane C"	Measured	Specified	Verify Measured equals Specified
Measurements			+/- 6mm
Cz (mm)			

__6.2 Locate the vertical plane parallel to the vehicle longitudinal centerline through the geometric center of the opening through which the right front air bag deploys into the occupant compartment. This is referred to as "Plane D." (Check determination method below.) (S22.4.1.2)

__Plane D determined using manufacturer's information supplied by the COTR. (Include manufacturer's information in the test report.)

OF

__Plane D determined by test lab personnel and approved by the COTR.

Date

(Include supporting documentation in the test report.)

I certify that I have read and performed each instruction.

"Plane D"	Measured	Specified	Verify Measured equals	
Measurements			Specified +/- 6mm	
Dy (mm)				
6.3 Mark the intersection of Planes C and D on the instrument panel.				

	Jugui Gillollico			opeomed 4 cmm	
Dy (mm)					
(_6.3 Mark the intersection of Planes C and D on the instrument panel.				
7.	5 th Female Dummy				
	Mark a point on the chi	n of the dummy 40	0 mm below the c	enter of the mouth. (Chin Point)	
	(S26.2.6)				
8.	6-Year-Old Dummy				
				t jacket on the midsaggital plane	
	which is 139 mm (5.5 in	n) ± 3 mm (± 0.1 ir	i) along the surfac	ce of the skin down from the top of	
	the skin at the neck line	e. Designate this p	ooint as "Point 1."	(S24.4.1.1)	
	"Point 1" measurem	nent m	ım		
9.	3-Year-Old Dummy				
				t jacket on the midsaggital plane	
				ce of the skin down from the top of	
	the skin at the neck line. Designate this point as "Point 1." (S22.4.1.1)				
	"Point 1" measurement	mm +	/- 3mm		

DATA SHEET 15

NHTSA	Suppression Test Using 12-month-orange A No	Test Date:
Laboratory:		st Technician(s):
Child R	Restraint Name, Model, Date of Manu	ıfacture:
(A child	st procedure will be completed with the	not have a removable base all be treated as two separate models, i.e. this form he base on and then repeated with the base off.
	Position: Rearmost, mid-height _a separate sheet for each of the three	_ Mid-position, mid-height Foremost, mid-height fore-aft positions.)
The	child restraint has NO visible damag	e (S20.1.1)
rear	rward-facing mode. (Child restraints I Position the seat's adjustable lumb lowest, retracted or deflated adjusti	estraints and convertible restraints in the isted in Appendix A, sections B and C) (S20.2.1.4) ar supports so that the lumbar supports are in the ment positions. (S20.1.9.1)
1.2	N/A – No lumbar adjustment Position any adjustable parts of the in the lowest or most open adjustm N/A – No additional support adjustm	
1.3		aft, independent of the seat back, set this adjustment .9.3)
1.4	Place the seat in the position speci	fied in the header information. Use the seat markings of Data Sheet 14 to set the fore-aft position, mid-height
1.5	The seat back angle, if adjustable, position for a 50th percentile adult (S20.1.9.5 and S8.1.3) N/A – No seat back angle adjusted Manufacturer's design seat back are	is set at the manufacturer's nominal design riding male in the manner specified by the manufacturer.
1.6	Any adjustment of the head restrair example, if it rotates, rotate it such possible.	at the full down and full forward position. (S20.1.9.6) at shall be used to position it full forward. For that the head restraint extends as far forward as
1.7	position for a 50th percentile adult i N/A – No adjustable upper seat Manufacturer's specified anchorage	norages at the vehicle manufacturer's nominal design male occupant (S20.2.1.4(c)) belt anchorage
1.8	Tested anchorage position Locate and mark a vertical Plane A restraint. (S20.2.1.2)	through the longitudinal centerline of the child
1.9	Read the child restraint owner's ma	nual for installation instructions.
1.10	aligned with Plane B (determined a	ward in the seat such that Plane A (item 1.8 bove) is nd marked during the completion of Data Sheet 14.)
1.11		t position with Plane A aligned with Plane B, secure e extent possible, the child restraint manufacturer's

		directions regarding proper installation of the restraint in the rear facing mode. (\$20.2.1.4(b)) Do NOT use any positioning devices such as towels. (FR 65 30711, footnote 23, 5/12/2000) If the vehicle has FMVSS 225 anchorages, do not attach (\$20.1.6) the child restraint to these anchorages. (\$20.2.1.4(a)(1)) Do NOT attach any
	1 10	tethers. (S20.1.8)
	.1.12	Place a load cell with a maximum full-scale reading of 225 N (50.6 lb) on a flat, straight section of the lap belt between the child restraint belt path and the contact point with the
		belt anchor or vehicle seat, on the side away from the buckle (to avoid interference from
		the shoulder portion of the belt). (\$20.2.1.4(c))
		Is there a sheath around the seat belt that interferes with the load cell? Yes No
		If yes, cut off all or part of the sheath. All Part
	1 13	Cinch the seat belt to a tension load of 130 N \pm 3N (29.2 lb \pm 0.7 lb) (S20.2.1.4(c))
	.1.10	Record seat belt tension
	1.14	Position the 49 CFR Part 572 Subpart R 12-month-old CRABI dummy in the child
		restraint by following, to the extent possible, the manufacturer's instructions provided with
		the child restraint. (\$20.2.1.4(d)) (The tension in the seat belt may change from item
		1.13. Do NOT readjust the tension unless the fore-aft position of the seat changes
		because of dummy contact.)
		If the seat must be moved rearward because of dummy contact with the instrument
		panel, describe the final location of the seat:
		N/A – No dummy contact with the instrument panel.
		Manual seat adjuster: detent(s) rearward of the forward most position (Move
		the seat the minimum number of detents to eliminate contact with the instrument
		panel.)
		Power seat adjuster: mm between instrument panel and child restraint (max.
		allowed is 5 mm.)
		Recinch the seat belt to a tension load of 130 N \pm 3N (29.2 lb \pm 0.7 lb)
		(S20.2.1.4(c))
	4 4 5	Record seat belt tension
	1.15	Complete rows 1 through 12 in Table 1 without changing the position of the child restraint
		or dummy. For each variation of blanket, handle and sunshield position, start the vehicle
		engine or place the ignition in the "on" position, whichever will turn on the suppression system, and close all vehicle doors. Wait 10 seconds, and then check whether the air
		bag is suppressed. (S20.2.1.4(e))
2	Linh	elted tests with rear-facing child restraints and convertible child restraints in the rear-facing
۷.		e. (Child restraints listed in Appendix A, sections B and C) (S20.2.2.4) – If the vehicle has
		SS 225 anchorages, do NOT attach (S20.1.6) the child restraint to these anchorages.
		0.2.1.4(a)(1)) Do NOT attach any tethers. (S20.1.8)
		out changing the position of the child restraint or dummy, disconnect the seat belt and
	retur	rn it to its stowed position.
		plete rows 13 through 24 in Table 1 without changing the position of the child restraint or
	dum	my. For each variation of blanket, handle and sunshield position, start the vehicle engine
	or pl	ace the ignition in the "on" position, whichever will turn on the suppression system, and
	close	e all vehicle doors. Wait 10 seconds, and then check whether the air bag is suppressed.
		0.2.2.4(c))
3.		elted tests using FMVSS 225 Anchorages with rear-facing child restraints and convertible
		restraints in the rear-facing mode. (Child restraints listed in Appendix A, sections B and
		S20.2.1.4) – Do NOT attach seat belts. (S20.1.6) Do NOT attach any tethers. (S20.1.8)
	N	/A - Vehicle does not have FMVSS 225 anchorages or child restraint does not have
	o 4	FMVSS 213 S5.9 devices to mate to the FMVSS 225 anchorages.
_	3.1.	Keep the same seat position as in 1.1 through 1.7 above.
	3.2.	Read the child restraint owner's manual for installation instructions. Attach the child restraint, facing rearward, to the FMVSS 225 anchorages according to
	3.3	the instructions in the child restraint owner's manual and the vehicle owner's manual. Do
		NOT use any positioning devices such as towels. (FR 65 30711, footnote 23, 5/12/2000)
		Do NOT attach any tethers. (S20.1.7)
		Do No Fallacit diff totalore. (Ozo. 1.7)

3.4	Position the 49 CFR Part 572 Subpart R 12-month-old CRABI dummy in the child restraint by following, to the extent possible, the manufacturer's instructions provided with the child restraint. (S20.2.1.4 (d))
	If the seat must be moved rearward because of dummy contact with the instrument panel, describe the final location of the seat:
	N/A – No dummy contact with the instrument panel.
	Manual seat adjuster: detent(s) rearward of the forward most position (Move
	the seat the minimum number of detents to eliminate contact with the instrument panel.)
	Power seat adjuster: mm between instrument panel and child restraint (max. allowed is 5 mm.)
3.5	Complete rows 25 through 36 in Table 1 without changing the position of the child restraint or dummy. For each position, start the vehicle engine or place the ignition in the "on" position, whichever will turn on the suppression system, and close all vehicle doors.
	Wait 10 seconds, and then check whether the air bag is suppressed. (S20.2.1.4(e))
	ted tests with convertible child restraints in the forward-facing mode. (Child restraints listed
	ppendix A, section C) (S20.2.1.5) – If the vehicle has FMVSS 225 anchorages, do not
	ch (S20.1.6) the child restraint to these anchorages. (S20.2.1.5 (a)(1)) Do NOT attach any
	ers. (S20.1.8) V/A – Not a convertible restraint
4.1	Keep the same seat position as in 1.1 through 1.7 above.
4.2	Read the child restraint owner's manual for installation instructions.
4.3	Place the child restraint facing forward in the seat such that Plane A (item 1.8 above) is
	aligned with Plane B (determined and marked during the completion of Data Sheet 14).
	(S20.2.1.5(a)(1))
4.4	While maintaining the child restraint position with Plane A aligned with Plane B, secure
	the child restraint by following, to the extent possible, the child restraint manufacturer's
	directions regarding proper installation of the restraint in the forward facing mode.
	(\$20.2.1.5(b)) Do NOT use any positioning devices such as towels. (FR 65 30711,
	footnote 23, 5/12/2000) If the vehicle has FMVSS 225 anchorages, do not attach (S20.1.6) the child restraint to these anchorages. (S20.2.1.5(a)(1) Do NOT attach any
	tethers. (S20.1.8)
4.5	Place a load cell with a maximum full-scale reading of 225 N (50.6 lb) on a flat, straight
	section of the lap belt between the child restraint belt path and the contact point with the
	belt anchor or vehicle seat, on the side away from the buckle (to avoid interference from
	the shoulder portion of the belt). (S20.2.1.5(c))
	Is there a sheath around the seat belt that interferes with the load cell?YesNo
4.0	If yes, cut off all or part of the sheath. — All — Part Oire by the great half the advancing lead of 400 N + 0N (00 0 lb + 0.7 lb) (000 0 4.5 (2))
4.6	Cinch the seat belt to a tension load of 130 N \pm 3N (29.2 lb \pm 0.7 lb) (S20.2.1.5(c)) Record seat belt tension
4.7	Position the 49 CFR Part 572 Subpart R 12-month-old CRABI dummy in the child
	restraint by following, to the extent possible, the manufacturer's instructions provided with
	the child restraint. (\$20.2.1.5(d)) (The tension in the seat belt may change from item 4.6.
	Do NOT readjust the tension unless the fore-aft position of the seat changes because of
	dummy contact.)
	If the seat must be moved rearward because of dummy contact with the instrument
	panel, describe the final location of the seat: N/A – No dummy contact with the instrument panel.
	Manual seat adjuster: detent(s) rearward of the forward most position (Move
	the seat the minimum number of detents to eliminate contact with the instrument
	panel.)
	Power seat adjuster: mm between instrument panel and child restraint (max.
	allowed is 5 mm.)
	Recinch the seat belt to a tension load of 130 N \pm 3N (29.2 lb \pm 0.7 lb)
	(S20.2.1.5(c)) Record seat belt tension

	4.8	Complete rows 37 through 48 in Table 1 below without changing restraint or dummy. For each variation of blanket, handle and so the vehicle engine or place the ignition in the "on" position, which suppression system, and close all vehicle doors. Wait 10 second whether the air bag is suppressed. (S20.2.1.5(e))	unshield position, start hever will turn on the
5.	(App not a	relted tests with rear-facing and convertible child restraints in the forendix A, sections Band C) (S20.2.2.5) – If the vehicle has FMVS attach (S20.1.6) the child restraint to these anchorages. Do NOT 0.1.8)	S 225 anchorages, do
	With	nout changing the position of the child restraint or dummy, disconing it to its stowed position.	nect the seat belt and
	dum or pl close	nplete rows 49 through 60 in Table 1 without changing the position my. For each variation of blanket, handle and sunshield position lace the ignition in the "on" position, whichever will turn on the supe all vehicle doors. Wait 10 seconds, and then check whether the 0.2.2.5(c))	, start the vehicle engine opression system, and
6.	Unb facir seat	elted tests using FMVSS 225 Anchorages with convertible child r ng mode. (Child restraints listed in Appendix A, section C) (S20.2. belts. (S20.1.6) Do NOT attach any tethers. (S20.1.8)	.1.5) – Do NOT attach
		N/A - Vehicle does not have FMVSS 225 anchorages or child rest FMVSS 213 S5.9 devices to mate to the FMVSS 225 ancho N/A – Not a convertible restraint	
_	6.1	Keep the same seat position as in 1.1 through 1.7 above.	
_	6.2 6.3	Read the child restraint owner's manual for installation instruction. Attach the child restraint, facing forward, to the FMVSS 225 and instructions in the child restraint owner's manual and the vehicle NOT attach any tethers. (S20.1.8) Do NOT use any positioning (FR 65 30711, footnote 23, 5/12/2000)	horages according to the owner's manual. Do
	6.4	Position the 49 CFR Part 572 Subpart R 12-month-old CRABI decrease the child restraint. (S20.2.1.5(d))	instructions provided with
		If the seat must be moved rearward because of dummy contact panel, describe the final location of the seat:	with the instrument
		N/A – No dummy contact with the instrument panel. Manual seat adjuster: detent(s) rearward of the forwathe seat the minimum number of detents to eliminate copanel.) Power seat adjuster: mm between instrument panel	ntact with the instrument
	6.5	allowed is 5 mm.) Complete rows 61 through 72 in Table 1 without changing the porestraint or dummy. For each variation of blanket, handle and so the vehicle engine or place the ignition in the "on" position, which suppression system, and close all vehicle doors. Wait 10 second whether the air bag is suppressed. (S20.2.1.5(e))	unshield position, start hever will turn on the
Īc	ertify	that I have read and performed each instruction.	Date

Table 1

27 225

28 225

29 225

30 225

31 225

32 225

34 225

35 225

36 225

225

33

Rear

Upright

Upright

Down

Down

Upright

Upright

Down

Down

Upright

Upright

In-use

In-use

Stowed

In-use

Stowed

In-use

Stowed

In-use

Stowed

Stowed

None

None

On

On

On

On

N/A

On

On

On

On

NH	TSA No				Te	st Date:	
Chi	ld Dootroint	Nama Mad	al Data of N	Appurfacture:			
				Manufacture: _	a removable ba		
	at Position:		st, mid-heig		sition, mid-heig		st, mid-height
	Belted,	Rear	Handle ¹	Sunshield ²	Blanket ³	Blanket ⁴	Suppressed,
	Unbelted,	facing,	(S20.1.3)		Position 1	Position 2	FAIL,
	FMVSS	Forward	,	,	(S20.1.5(a))	(S20.1.5(b))	Or N/A
	225	facing					
1	Belted	Rear	Down	In-use	None	N/A	
2	Belted	Rear	Down	Stowed	None	N/A	
3	Belted	Rear	Upright	In-use	None	N/A	
4	Belted	Rear	Upright	Stowed	None	N/A	
5	Belted	Rear	Down	In-use	On	N/A	
6	Belted	Rear	Down	Stowed	On	N/A	
7	Belted	Rear	Upright	In-use	On	N/A	
8	Belted	Rear	Upright	Stowed	On	N/A	
9	Belted	Rear	Down	In-use	N/A	On	
10	Belted	Rear	Down	Stowed	N/A	On	
11	Belted	Rear	Upright	In-use	N/A	On	
12	Belted	Rear	Upright	Stowed	N/A	On	
13	Unbelted	Rear	Down	In-use	None	N/A	
14	Unbelted	Rear	Down	Stowed	None	N/A	
15	Unbelted	Rear	Upright	In-use	None	N/A	
16	Unbelted	Rear	Upright	Stowed	None	N/A	
17	Unbelted	Rear	Down	In-use	On	N/A	
18	Unbelted	Rear	Down	Stowed	On	N/A	
19	Unbelted	Rear	Upright	In-use	On	N/A	
20	Unbelted	Rear	Upright	Stowed	On	N/A	
21	Unbelted	Rear	Down	In-use	N/A	On	
22	Unbelted	Rear	Down	Stowed	N/A	On	
23	Unbelted	Rear	Upright	In-use	N/A	On	
24	Unbelted	Rear	Upright	Stowed	N/A	On	
25	225	Rear	Down	In-use	None	N/A	
26	225	Rear	Down	Stowed	None	N/A	

	Belted, Unbelted, FMVSS 225	Rear facing, Forward facing	Handle ¹ (S20.1.3)	Sunshield ² (S20.1.4)	Blanket ³ Position 1 (S20.1.5(a))	Blanket ⁴ Position 2 (S20.1.5(b))	Suppressed, FAIL, Or N/A
37	Belted	Forward ⁵	Down	In-use	None	N/A	
38	Belted	Forward ⁵	Down	Stowed	None	N/A	
39	Belted	Forward ⁵	Upright	In-use	None	N/A	
40	Belted	Forward ⁵	Upright	Stowed	None	N/A	
41	Belted	Forward ⁵	Down	In-use	On	N/A	
42	Belted	Forward ⁵	Down	Stowed	On	N/A	
43	Belted	Forward ⁵	Upright	In-use	On	N/A	
44	Belted	Forward ⁵	Upright	Stowed	On	N/A	
45	Belted	Forward ⁵	Down	In-use	N/A	On	
46	Belted	Forward ⁵	Down	Stowed	N/A	On	
47	Belted	Forward ⁵	Upright	In-use	N/A	On	
48	Belted	Forward ⁵	Upright	Stowed	N/A	On	
49	Unbelted	Forward	Down	In-use	None	N/A	
50	Unbelted	Forward	Down	Stowed	None	N/A	
51	Unbelted	Forward	Upright	In-use	None	N/A	
52	Unbelted	Forward	Upright	Stowed	None	N/A	
53	Unbelted	Forward	Down	In-use	On	N/A	
54	Unbelted	Forward	Down	Stowed	On	N/A	
55	Unbelted	Forward	Upright	In-use	On	N/A	
56	Unbelted	Forward	Upright	Stowed	On	N/A	
57	Unbelted	Forward	Down	In-use	N/A	On	
58	Unbelted	Forward	Down	Stowed	N/A	On	
59	Unbelted	Forward	Upright	In-use	N/A	On	
60	Unbelted	Forward	Upright	Stowed	N/A	On	
61	225	Forward ⁵	Down	In-use	None	N/A	
62	225	Forward ⁵	Down	Stowed	None	N/A	
63	225	Forward ⁵	Upright	In-use	None	N/A	
64	225	Forward ⁵	Upright	Stowed	None	N/A	
65	225	Forward ⁵	Down	In-use	On	N/A	
66	225	Forward ⁵	Down	Stowed	On	N/A	
67	225	Forward ⁵	Upright	In-use	On	N/A	
68	225	Forward ⁵	Upright	Stowed	On	N/A	
69	225	Forward ⁵	Down	In-use	N/A	On	
70	225	Forward ⁵	Down	Stowed	N/A	On	
71	225	Forward ⁵	Upright	In-use	N/A	On	
72	225	Forward ⁵	Upright	Stowed	N/A	On	

- 1 If there is no handle, place N/A in the Suppressed/FAIL column in the rows marked "Upright." "Down" means the child restraint manufacturer's recommended position or there is no handle.
- 2 If there is no sunshield, place N/A in the Suppressed/FAIL column in the rows marked "In-use."
- 3 Blanket position 1 (S20.1.5(a)): Place a blanket on the child restraint so that the top and side edges of the restraint are covered. The vehicle seat shall not support the blanket.

- 4 Blanket position 2 (S20.1.5(b)): Place a blanket on the child restraint so that it rests on the top of the vehicle's seat back and the forward most (towards the instrument panel) edge of the child restraint.
- 5 Convertible restraints ONLY (S20.2.1.5) (Appendix A, section C)
 Record the weight of the blanket. (Cannot be more than 1 kg (2.2 lb).)

(S20.1.5)	
Comments (Record any position readjustments or problems by first stating the row number to which the comment applies.):	
	_

DATA SHEET 16

Suppression Test Using Newborn Infant Dummy (Part 572, Subpart K)(S20) (Car beds listed in Appendix A, section A)

NHTSA	No Test Date:
Laborat	tory:Test Technician(s):
Car Bed	d Name, Model, and Manufacture Date:
(A car b	OnOffN/A-Restraint does not have a removable base bed with a removable base shall be treated as two separate models, i.e. this form and test ure will be completed with the base on and then repeated on a new form with the base off.
	osition: Rearmost, mid-height Mid-position, mid-height Foremost, mid-height separate sheet for each of the three fore-aft positions.)
The	child restraint has NO visible damage (S20.1.1)
. Belte 1.1	ed suppression tests with car beds. (S20.2.3) (Car beds listed in Appendix A, section A) Position the seat's adjustable lumbar supports so that the lumbar supports are in the lowest, retracted or deflated adjustment positions. (S20.1.9.1)
1.2	N/A – No lumbar adjustment Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S20.1.9.2)
1.3	N/A – No additional support adjustment If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S20.1.9.3)
1.4	N/A – No independent fore-aft seat cushion adjustment Place the seat in the position specified in the header information. Use the seat markings determined during the completion of Data Sheet 14 to set the fore-aft position, mid-height
1.5	position and the seat cushion angle. The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S20.1.9.5 and S8.1.3)
	N/A – No seat back angle adjustment Manufacturer's design seat back angle Tested seat back angle
1.6	If adjustable, set the head restraint at the full down and full forward position. (S20.1.9.6) Any adjustment of the head restraint shall be used to position it full forward. For example, if it rotates, rotate it such that the head restraint extends as far forward as possible.
1.7	N/A – No head restraint adjustment Place any adjustable seat belt anchorages at the vehicle manufacturer's nominal design position for a 50th percentile adult male occupant (S20.2.3.2 (b)) N/A – No adjustable upper seat belt anchorage Manufacturer's specified anchorage position.
1.8 1.9	Tested anchorage position Read the car bed owner's manual for installation instructions. Secure the car bed with the seat belt by following, to the extent possible, the car bed
	manufacturer's directions regarding proper installation of the restraint. (S20.2.3.2 (a)) Do NOT use any positioning devices such as towels. If the vehicle has FMVSS 225 anchorages, do not attach the car bed to these anchorages. (S20.1.6) Do NOT attach
1.10	any tethers. (S20.1.8) Position the 49 CFR Part 572 Subpart K Newborn Infant dummy in the car bed by following, to the extent possible, the car bed manufacturer's instructions provided with the car bed. (S20.2.3.2 (c))

	If the seat must be moved rearward because of contact with the instrument panel,
	describe the final location of the seat:
	N/A – No contact with the instrument panel.
	Manual seat adjuster: detent(s) rearward of the fore-most position (Move the
	seat the minimum number of detents to eliminate contact with the instrument
	panel.)
	Power seat adjuster: mm between instrument panel and child restraint (max.
	allowed is 5 mm.)
1.11	Complete rows 1 through 12 in Table 2 without changing the position of the child restraint or dummy. For each variation of blanket, handle and sunshield position, start the vehicle engine or place the ignition in the "on" position, whichever will turn on the suppression system, and close all vehicle doors. Wait 10 seconds, and then check whether the air bag is suppressed.
App	elted suppression tests using FMVSS 225 Anchorages with car bed. (Car beds listed in endix A, section A) Car beds are not required by FMVSS 213 to have devices to mate to /SS 225 anchorages.
N	/A - Vehicle does not have FMVSS 225 anchorages or car bed does not have FMVSS 213
	devices to mate to the FMVSS 225 anchorages.
2.1	Keep the same seat position as in 1.1 through 1.7 above.
2.2	Read the car bed owner's manual and the vehicle owner's manual for installation
	instructions.
2.3	Attach the car bed to the FMVSS 225 anchorages according to the instructions in the car bed owner's manual and the vehicle owner's manual. Do NOT attach seat belts.
	(S20.1.6) Do NOT attach any tethers. (S20.1.8)
2.4	Position the 49 CFR Part 572 Subpart K Newborn Infant dummy in the car bed by following, to the extent possible, the car bed manufacturer's instructions provided with the car bed. (\$20.2.3.2 (c))
	If the seat must be moved rearward because of contact with the instrument panel,
	describe the final location of the seat:
	N/A – No contact with the instrument panel.
	Manual seat adjuster: detent(s) rearward of the forward most position (Move the seat the minimum number of detents to eliminate contact with the instrument panel.)
	Power seat adjuster: mm between instrument panel and child restraint (max.
2.5	allowed is 5 mm.)
2.5	Complete rows 13 through 24 in Table 2 without changing the position of the child
	restraint or dummy. For each position, start the vehicle engine or place the ignition in the
	"on" position, whichever will turn on the suppression system, and close all vehicle doors.
	Wait 10 seconds, and then check whether the air bag is suppressed. (S20.2.3.2(d))
Laadifi	that I have read and restaured each instruction.
i certify	that I have read and performed each instruction. Date

Table 2 Test Date: _____ NHTSA No. Car Bed Name, Model, and Manufacture Date: Base: On Off N/A-Restraint does not have a removable base Seat Position: Rearmost, mid-height Mid-position, mid-height Foremost, mid-height Belted. Handle¹ Sunshield² Blanket³ Blanket⁴ Suppressed, **FMVSS** (S20.1.3)(S20.1.4) Position 1 Position 2 FAIL. 225 (S20.1.5(a))(S20.1.5(b))Or N/A Fully Open 1 Belted Down None N/A 2 Belted Fully Closed None N/A Down 3 Fully Open Belted Upright None N/A 4 Fully Closed **Belted** Upright None N/A 5 Belted Down Fully Open N/A On Fully Closed 6 N/A **Belted** Down On 7 Fully Open **Belted** Upright On N/A 8 **Belted** Upright Fully Closed N/A On Fully Open 9 **Belted** Down N/A On Fully Closed 10 Belted Down N/A On 11 Belted Upright Fully Open N/A On Belted Fully Closed 12 Upright N/A On 13 225 Down Fully Open None N/A Fully Closed 14 225 Down None N/A 225 Fully Open 15 Upright None N/A 16 225 Upright Fully Closed None N/A 225 Fully Open 17 Down N/A On 18 225 Down Fully Closed On N/A 225 Fully Open 19 Upright On N/A Fully Closed 20 225 Upright On N/A 21 225 Fully Open Down N/A On 22 225 Down Fully Closed N/A On

If there is no handle, place N/A in the Suppressed /FAIL column in the rows marked "Upright." "Down," means the car bed manufacturer's recommended position or there is no handle.

N/A

N/A

On

On

Fully Open

Fully Closed

23

24

225

225

Upright

Upright

- 2 If there is no sunshield, place N/A in the Suppressed/FAIL column in the rows marked "In-use."
- 3 Blanket position 1 (S20.1.5 (a)): Place a blanket on the car bed so that all edges of the restraint are covered. The vehicle seat shall not support the blanket.
- 3 Blanket position 2 (S20.1.5 (b)): Place a blanket on the car bed so that it rests on the top of the vehicle's seat back and the forward most (towards the instrument panel) edge of the car bed.

Record the weight of the blanket. (Cannot be more than 1 kg (2.2 lb).)(S20.1.5)	
Comments (Record any position readjustments or problems by first stating the row number to which the comment applies.):	

DATA SHEET 17
Suppression Test Using 3-Year-Old Dummy (Part 572, Subpart P) and Booster Seats (S22)

NHTSA	No Test Date:
Labora	tory: Test Technician(s):
Booste	Seat Name, Model, and Manufacture Date:
	osition: Rearmost, mid-height Mid-position, mid-height Foremost, mid-height separate sheet for each of the three fore-aft positions.)
The	pooster seat has NO visible damage. (S22.1.1)
	ed tests with a booster seat. (Booster seats listed in Appendix A, section D) Position the seat's adjustable lumbar supports so that the lumbar supports are in the lowest, retracted or deflated adjustment positions. (S22.1.7.1)
1.2	N/A – No lumbar adjustment Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S22.1.7.2) N/A – No additional support adjustment
1.3	If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S22.1.7.3) N/A – No independent fore-aft seat cushion adjustment
1.4	Place the seat in the position specified in the header information. Use the seat markings determined during the completion of Data Sheet 14 to set the fore-aft position, mid-height position and the seat cushion angle.
1.5	The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S22.1.7.5 and S8.1.3) N/A - No seat back angle adjustment
1.6	Manufacturer's design seat back angle Tested seat back angle If adjustable, set the head restraint at the full down and full forward position. (S22.1.7.6) Any adjustment of the head restraint shall be used to position it full forward. For example, if it rotates, rotate it such that the head restraint extends as far forward as possible.
1.7	N/A – No head restraint adjustment Place any adjustable seat belt anchorages at the vehicle manufacturer's nominal design position for a 50th percentile adult male occupant (S22.2.1.6.1) N/A – No adjustable upper seat belt anchorage Manufacturer's specified anchorage position.
1.8	Tested anchorage position Locate and mark a vertical Plane A through the longitudinal centerline of the booster seat. (S22.2.1.2)
1.9 1.10	Read the booster seat owner's manual for installation instructions Place the booster seat in the seat such that Plane A (item 1.8 above) is aligned with Plane B (determined and marked during the completion of Data Sheet 14). (S22.2.1.4(a)(1))
1.11	While maintaining the booster seat with Plane A aligned with Plane B, secure the booster seat by following, to the extent possible, the booster seat manufacturer's directions regarding proper installation of the booster seat. Do NOT use any positioning devices such as towels. (FR 65 30711, footnote 23, 5/12/2000) If the vehicle has FMVSS 225 anchorages, do not attach (S22.1.3) the booster seat to these anchorages. (S22.2.1.4(a)) Do NOT attach any tethers. (S22.1.4)

1.12	Is the booster seat designed to be secured to the vehicle seat even when empty?
	Yes – complete item 1.12 No – skip item 1.12
	Place a load cell with a maximum full-scale reading of 225 N (50.6 lb) on a flat, straight
	section of the lap belt between the booster seat belt path and the contact point with the
	belt anchor or vehicle seat, on the side away from the buckle (to avoid interference from
	the shoulder portion of the belt). (\$22.2.1.6.1)
	Is there a sheath around the seat belt that interferes with the load cell? Yes No
	If yes, cut off all or part of the sheath.
1 12	Cinch the seat belt to a tension load of 130 N \pm 3N (29.2 lb \pm 0.7 lb) (S22.2.1.6.1)
1.13	Record seat belt tension
	N/A – The booster seat is not designed to be secured to the vehicle seat even when
	empty.
1 14	Position the 49 CFR Part 572 Subpart P 3-year-old dummy in the booster seat such that
'	the dummy's lower torso is centered on the booster seat cushion and the dummy's back
	is against the seat back of the booster seat or if there is no booster seat back, the vehicle
	seat back. Place the arms at the dummy's sides. (\$22.2.1.6.2)
1 15	Attach all belts that come with the booster seat that are appropriate for a child of the
	same height and weight as the 3-year-old child dummy (3'-1", 34 lb), if any, by following,
	to the extent possible, the manufacturer's instructions for seating children provided with
	the booster seat. (S22.2.1.6.3)
	N/A – No seat belts come with the booster seat.
1.16	Place the Type 2 manual belt around the test dummy and fasten the latch. Remove all
	slack from the lap belt portion. Pull the upper torso webbing out of the retractor and allow
	it to retract; repeat this four times. Apply a 9 to 18 N (2 to 4lb) tension load to the lap belt.
	Allow the excess webbing in the upper torso belt to be retracted by the retractive force of
	the retractor. (S22.2.1.6.4)
	N/A – Booster seat belts that come with the booster seat are used to secure the
	dummy and the booster seat is secured with the vehicle's seat belt. (See 1.15)
1.17	Start the vehicle engine or place the ignition in the "on" position, whichever will turn on
	the suppression system, and close all vehicle doors. (S22.2.1.7) Wait 10 seconds, and
	then check whether the air bag is suppressed. (S22.2.1.8)
	Air Bag Suppressed – Pass
	Air Bag Not Suppressed – FAIL
1.18	Return the ignition switch to the "off" position.
0 11-6	altered to a to union CMV (CC 2005 A make a manage with a broaden and to (Deceter and to listed in
	elted tests using FMVSS 225 Anchorages with a booster seat. (Booster seats listed in endix A, sections D) – Do NOT attach seat belts. (S22.2.1.4 (b)) Do NOT attach any
	erdix A, sections by – bothor attach seat beits. (322.2.1.4 (b)) bothor attach any ers. (\$22.1.4)
	(A - Vehicle does not have FMVSS 225 anchorages or booster seat does not have
'	FMVSS 213 S5.9 devices to mate to the FMVSS 225 anchorages.
2.1	Keep the same seat position as in 1.1 through 1.7 above.
2.2	Read the booster seat and vehicle owner's manuals for installation instructions
2.3	Attach the booster seat to the FMVSS 225 anchorages according to the instructions in
	the booster seat and the vehicle owner's manuals. Do NOT attach any tethers.
	(S22.1.4(a)) Do NOT use any positioning devices such as towels. (FR 65 30711,
	footnote 23, 5/12/2000)
2.4	Position the 49 CFR Part 572 Subpart P 3-year-old dummy in the booster seat such that
	the dummy's lower torso is centered on the booster seat cushion and the dummy's back
	is against the seat back of the booster seat or if there is no booster seat back, the vehicle
	seat back. Place the arms at the dummy's sides. (S22.2.1.6.2)
2.5	Attach all belts that come with the booster seat that are appropriate for a child of the
	same height and weight as the 3-year-old child dummy (3'-1", 34 lb), if any, by following,
	to the extent possible, the manufacturer's instructions for seating children provided with
	the booster seat. (S22.2.1.6.3)

2.18 Start the vehicle engine or place the ignition in the "on" post the suppression system, and close all vehicle doors. (S22. then check whether the air bag is suppressed. (S22.2.1.8) Air Bag Suppressed – PassAir Bag Not Suppressed – FAIL2.19 Return the ignition switch to the "off" position.	
I certify that I have read and performed each instruction.	Date

DATA SHEET 18

Suppression Test Using 3-Year-Old Dummy (Part 572, Subpart P) and Forward Facing Convertible Child Restraints (S22)

NHISA	No lest Date:
Laborat	tory: Test Technician(s):
Child R	estraint Name, Model, and Manufacture Date:
Seat Po (Use a	osition: Rearmost, mid-height Mid-position, mid-height Foremost, mid-height separate sheet for each of the three fore-aft positions.)
The f	forward facing child restraint seat has NO visible damage. (S22.1.1)
	ed tests with a forward facing child restraint. (Child restraints listed in Appendix A,
1.1	ion C) Position the seat's adjustable lumbar supports so that the lumbar supports are in the lowest, retracted or deflated adjustment positions. (S22.1.7.1)
1.2	N/A – No lumbar adjustment Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S22.1.7.2)
1.3	N/A – No additional support adjustment If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S22.1.7.3) N/A – No independent fore-aft seat cushion adjustment
1.4	Place the seat in the position specified in the header information. Use the seat markings determined during the completion of Data Sheet 14 to set the fore-aft position, mid-height position and the seat cushion angle.
1.5	The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S22.1.7.5 and S8.1.3)
	N/A – No seat back angle adjustment Manufacturer's design seat back angle Tested seat back angle
1.6	If adjustable, set the head restraint at the full down and full forward position. (S22.1.7.6) Any adjustment of the head restraint shall be used to position it full forward. For example, if it rotates, rotate it such that the head restraint extends as far forward as possible. N/A – No head restraint adjustment
1.7	Locate and mark a vertical Plane A through the longitudinal centerline of the child restraint. (S22.2.1.2)
1.8	Place any adjustable seat belt anchorages at the vehicle manufacturer's nominal design position for a 50th percentile adult male occupant (S22.2.1.5.1) N/A – No adjustable upper seat belt anchorage Manufacturer's specified anchorage position.
1.9 1.10	Tested anchorage position Read the child restraint owner's manual for installation instructions Place the child restraint facing forward in the seat such that Plane A (item 1.7 above) is
_	aligned with Plane B (determined and marked during the completion of Data Sheet 14). (S22.2.1.4 (a)(1))
1.11	While maintaining the child restraint position with Plane A aligned with Plane B, secure the child restraint by following, to the extent possible, the child restraint manufacturer's directions regarding proper installation of the restraint in the forward facing mode. Do NOT use any positioning devices such as towels. (FR 65 30711, footnote 23, 5/12/2000) If the vehicle has FMVSS 225 anchorages, do not attach (S22.1.3) the child restraint to these anchorages. (S22.2.1.4 (a)) Do NOT attach any tethers. (S22.1.4)

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DATA SHEET 19

	uppression Tests Using an Ui No	Test Date:
Laborat	tory:	Test Technician(s):
Dummy	/ Serial No	
	osition: Rearmost, mid-he separate sheet for each of the	eight Mid-position, mid-height Foremost, mid-height e three fore-aft positions.)
Do NO	T use seat belts for these test	s. (S22.2.2)
1. 1.1	lowest, retracted or deflated	e lumbar supports so that the lumbar supports are in the adjustment positions. (S22.1.7.1)
1.2		of the seat that provide additional support so that they are djustment position. (S22.1.7.2)
1.3	If the seat cushion adjusts fo to the full rearward position.	re and aft, independent of the seat back, set this adjustment
1.4	Place the seat in the position	specified in the header information. Use the seat markings etion of Data Sheet 14 to set the fore-aft position, mid-height
1.5	The seat back angle, if adjus	stable, is set at the manufacturer's nominal design riding adult male in the manner specified by the manufacturer.
1.6	If adjustable, set the head re Any adjustment of the head i	straint at the full down and full forward position. (S22.1.7.6) restraint shall be used to position it full forward. For t such that the head restraint extends as far forward as
1.7		eated position and place it on the right front outboard seat.
1.8	Position the dummy such that	at its midsagittal plane is coincident with Plane B (determined eletion of Data Sheet 14). (S22.2.2.1(b))
	Position the dummy's thighs Allow the legs of the dummy If the seat must be moved re panel, describe the final loca N/A – No dummy	contact with the instrument panel.
4.40	the seat the minimur panel.) Power seat adjuster: allowed is 5 mm.)	r: detent(s) rearward of the forward most position (Move n number of detents to eliminate contact with the instrument mm between instrument panel and child restraint (max.
		rms until they contact the seat back. (S22.2.2.1(d)) rms until the dummy's hands contact the seat cushion.

1.14	Start the vehicle engine or place the ignition in the "on" position, whichever will turn on the suppression system, and close all vehicle doors. (S22.2.2.1(f)) Wait 10 seconds, and then check whether the air bag is suppressed. (S22.2.2.1(g))
	Air Bag Suppressed – Pass
4.45	Air Bag Not Suppressed – FAIL
1.15 2.	Return the ignition switch to the "off" position.
	Sitting on seat with back against reclined seat back (S22.2.2.2)
	I/A – No seat back angle adjustment
2.1	Keep the dummy and the seat in the same position as item 1 above. Recline the seat back an additional 25 degrees or the closest position that does not
	exceed 25 degrees. (S22.2.2.2)
	Initial seat back angle
	Final seat back angle
2.3	Verify the dummy's midsagittal plane is coincident with Plane B (determined and marked
	during the completion of Data Sheet 14). (S22.2.2.1(b))
2.4	Verify the dummy's torso is against the seat back. (\$22.2.2.1(b))
2.5	Verify the dummy's thighs are against the seat cushion. (S22.2.2.1(b))
2.6	Allow the legs of the dummy to extend off the surface of the seat. (S22.2.2.1(c))
	If the seat must be moved rearward because of dummy contact with the instrument
	panel, describe the final location of the seat:
	N/A – No dummy contact with the instrument panel.
	Manual seat adjuster: detent(s) rearward of the forward most position (Move the seat the minimum number of detents to eliminate contact with the instrument
	panel.)
	Power seat adjuster: mm between instrument panel and child restraint (max.
	allowed is 5 mm.)
2.7	Verify the dummy's upper arms contact the seat back. (S22.2.2.1(d))
2.8	Verify the dummy's hands contact the seat cushion. (\$22.2.2.1(e))
2.9	Start the vehicle engine or place the ignition in the "on" position, whichever will turn on
	the suppression system, and close all vehicle doors. (S22.2.2.1(f)) Wait 10 seconds, and
	then check whether the air bag is suppressed. (S22.2.2.1(g))
	Air Bag Suppressed – Pass
2.40	Air Bag Not Suppressed – FAIL
	Return the ignition switch to the "off" position. ng on seat with back not against seat back (S22.2.2.3)
3. 3.1	Keep the dummy and the seat in the same position as item 2 above.
3.2	Incline the seat back to the manufacturer's nominal design riding position for a 50th
0.2	percentile adult male in the manner specified by the manufacturer. (S22.1.7.5 and
	S8.1.3)
	N/A – No seat back angle adjustment
	Manufacturer's design seat back angle
	Tested seat back angle
3.3	Verify the dummy's midsagittal plane is coincident with Plane B (determined and marked
	during the completion of Data Sheet 14). (S22.2.2.3(b))
3.4	Verify the dummy's torso is against the seat back.
3.5 3.6	Verify the dummy's thighs are against the seat cushion. (\$22.2.2.3(c))
3.6 3.7	Rotate the dummy forward until the spine is vertical. (S22.2.2.3(b)) Keeping the spine vertical, move the dummy fore or aft to position the dummy's back 25
3.7	to 150 mm from the seat back as measured horizontally from the dummy's midsagittal
	plane at the mid sternum level. (S22.2.2.3(b))
	Distance measured from seat back (25 to 150 mm)
3.8	Allow the legs of the dummy to extend off the surface of the seat. (S22.2.2.3(d))
	If the seat must be moved rearward because of dummy contact with the instrument
	panel, describe the final location of the seat:
	N/A – No dummy contact with the instrument panel.

	Manual seat adjuster: detent(s) rearward of the forward most position (Move the seat the minimum number of detents to eliminate contact with the instrument
	panel.)
	Power seat adjuster: mm between instrument panel and child restraint (max.
	allowed is 5 mm.)
3.9	If necessary, hold the dummy in position with a material that has a maximum breaking
	strength of 311 N. (S22.2.2.3 (b))
	N/A – Dummy did not need to be supported.
	Position the dummy's upper arms parallel to the spine. (S22.2.2.3 (e))
	Rotate the dummy's lower arms until the hands contact the seat cushion. (S22.2.2.3 (e))
3.12	Start the vehicle engine or place the ignition in the "on" position, whichever will turn on
	the suppression system, and close all vehicle doors. (S22.2.2.3 (f)) Wait 10 seconds,
	and then check whether the air bag is suppressed. (S22.2.2.3 (g))
	Air Bag Suppressed – Pass Air Bag Not Suppressed – FAIL
3 13	Return the ignition switch to the "off" position.
4.	Sitting on seat edge, spine vertical, hands by the dummy's side (S22.2.2.4)
 4.1	Keep the seat in the end position used for 3 above.
4.2	Position the dummy in the seated position and place it on the right front outboard seat.
	(S22.2.2.1(a))
4.3	Position the dummy such that its midsagittal plane is coincident with Plane B (determined
	and marked during the completion of Data Sheet 14). (S22.2.2.4(a))
4.4	Position the dummy in the seated position forward in the seat such that the legs are
	vertical and the back of the legs rest against the front of the seat with the spine vertical.
	If the dummy's feet contact the floor pan raising part of the thighs off the seat cushion,
	rotate the legs forward until the dummy's thighs are resting on the seat cushion with the feet positioned flat on the floor pan and the dummy spine vertical. (S22.2.2.4(b))
	If the seat must be moved rearward because of dummy contact with the instrument
	panel, describe the final location of the seat:
	N/A – No dummy contact with the instrument panel.
	Manual seat adjuster: detent(s) rearward of the forward most position (Move
	the seat the minimum number of detents to eliminate contact with the instrument
	panel.)
	Power seat adjuster: mm between instrument panel and child restraint (max.
4.5	allowed is 5 mm.)
4.5 4.6	Position the dummy's upper arms parallel to the spine. (S22.2.2.4(c)) Rotate the dummy's lower arms until the hands contact the seat cushion. (S22.2.2.4(d))
4.0	If necessary, hold the dummy in position with a material that has a maximum breaking
	strength of 311 N. (S22.2.2.4(b))
4.8	Start the vehicle engine or place the ignition in the "on" position, whichever will turn on
	the suppression system, and close all vehicle doors. (S22.2.2.4(e)) Wait 10 seconds,
	and then check whether the air bag is suppressed. (\$22.2.2.4(f))
	Air Bag Suppressed – Pass
	Air Bag Not Suppressed – FAIL
4.9	Return the ignition switch to the "off" position.
5.	Standing on seat, facing forward (S22.2.2.5)
5.1	Keep the seat in the end position used for 4 above.
5.2	Position the dummy in a standing position on the right front outboard seat cushion facing the front of the vehicle with the midsagittal plane coincident with Plane B (determined and
	marked during the completion of Data Sheet 14) and with the heels of the dummy's feet
	in contact with the seat back. (S22.2.2.5(a))
5.3	Rest the dummy against the seat back, with the arms parallel to the spine. (S22.2.2.5(b))
5.4	If the seat back must be reclined because of dummy contact with the roof, describe the
	final location of the seat:
	N/A – No dummy contact with the roof.

	Manual seat back recliner: detent(s) rearward of the forward most position (Move the seat the minimum number of detents to eliminate contact with the
	roof.)
	Power seat adjuster: mm between roof and dummy head (max. allowed is 5 mm.)
5.5	If necessary, hold the dummy in position using a material that has a maximum breaking
	strength of 311 N or spacer blocks. (S22.2.2.5 (d))N/A – Dummy did not need to be supported.
5.6	Start the vehicle engine or place the ignition in the "on" position, whichever will turn on
	the suppression system, and close all vehicle doors. (S22.2.2.5(e)) Wait 10 seconds,
	and then check whether the air bag is suppressed. (S22.2.2.5(f))
	Air Bag Suppressed – Pass
	Air Bag Not Suppressed – FAIL
5.7	Return the ignition switch to the "off" position.
6.	Kneeling on seat facing forward (S22.2.2.6)
6.1	Keep the seat in the end position used for 5 above.
6.2	If the seat back angle was changed in 5.4 above, reset it to the manufacturer's nominal
	design riding position for a 50th percentile adult male in the manner specified by the
	manufacturer. (S22.1.7.5 and S8.1.3)
	N/A – No seat back angle adjustment
	N/A – The seat back angle was not adjusted in 5.4 above.
	Manufacturer's design seat back angle
	Tested seat back angle
6.3	Position the dummy in a kneeling position on the right front outboard seat cushion facing
	the front of the vehicle with the midsagittal plane coincident with Plane B (determined and
	marked during the completion of Data Sheet 14) with the toes at the intersection of the
	seat back and seat cushion and with the spine vertical. (S22.2.2.6(a) and (b))
6.4	Push down on the legs so that they contact the seat as much as possible and then
	release. (S22.2.2.6(b))
6.5	Place the arms parallel to the spine. (S22.2.2.6(b))
6.6	If necessary, hold the dummy in position using a material that has a maximum breaking
	strength of 311 N or spacer blocks. (S22.2.2.6(c))
	N/A – Dummy did not need to be supported.
6.7	Start the vehicle engine or place the ignition in the "on" position, whichever will turn on
	the suppression system, and close all vehicle doors. (S22.2.2.6(d)) Wait 10 seconds,
	and then check whether the air bag is suppressed. (S22.2.2.6(e))
	Air Bag Suppressed – Pass
	Air Bag Not Suppressed – FAIL
6.8	Return the ignition switch to the "off" position.
7	Kneeling on seat facing rearward (S22.2.2.7)
7.1	Keep the seat in the end position used for 6 above.
7.2	Position the dummy in a kneeling position on the right front outboard seat cushion facing
	the rear of the vehicle with the midsagittal plane coincident with Plane B (determined and
	marked during the completion of Data Sheet 14) with the head and torso in contact with
	the seat back. (S22.2.2.7 (a) and (b))
7.3	Push down on the legs so that they contact the seat as much as possible and then
	release. (S22.2.2.7(b))
7.4	Place the arms parallel to the spine. (S22.2.2.7(b))
7.5	Start the vehicle engine or place the ignition in the "on" position, whichever will turn on
	the suppression system, and close all vehicle doors. (S22.2.2.7(c)) Wait 10 seconds,
	and then check whether the air bag is suppressed. (S22.2.2.7(d))
	Air Bag Suppressed – Pass
7.0	Air Bag Not Suppressed – FAIL
7.6	Return the ignition switch to the "off" position.
	g on seat (S22.2.2.8)
O. I	Does the front seat have 3 or more designated seating positions?

	Yes, No, this form is complete.
8.2	Keep the seat in the end position used for 7 above.
8.3	Lay the dummy on the right front outboard seat with the spine perpendicular to the
	vehicle's longitudinal axis, with the dummy facing forward and the head towards the right
	front door. (S22.2.2.8(a)(2), & S22.2.2.8(a)(5), and S22.2.2.8(a)(6))
8.4	Position the dummy so that the midsagittal plane is horizontal and a plane passing
	through the two shoulder joints of the dummy is vertical. (S22.2.2.8(a)(1) and
	S22.2.2.8(a)(4))
8.5	Position the dummy's arms parallel to the spine. (S22.2.2.8(a)(3))
8.6	Position the dummy so that it is as far back in the seat as possible. (S22.2.2.8(a)(8))
8.7	Position the dummy so that the topmost point of the dummy's head is 50 to 100 mm from
	the vehicle door. (S22.2.2.8(a)(7))
8.8	Rotate both thighs as much as possible toward the chest of the dummy and rotate the
	legs as much as possible against the thighs. (S22.2.2.8(b))
8.9	Position the dummy's upper left arm perpendicular to the longitudinal centerline of the
	vehicle and rotate the lower left arm about the elbow joint and toward the dummy's head
	until movement is obstructed. (S22.2.2.8(c))
8.10	Start the vehicle engine or place the ignition in the "on" position, whichever will turn on
	the suppression system, and close all vehicle doors. (S22.2.2.8(d)) Wait 10 seconds,
	and then check whether the air bag is suppressed. (S22.2.2.8(e))
	Air Bag Suppressed – Pass
	Air Bag Not Suppressed – FAIL
8.11	Return the ignition switch to the "off" position.
I certify	that I have read and performed each instruction. Date

DATA SHEET 20
Suppression Test Using 6-Year-Old Dummy (Part 572, Subpart N) and Booster Seats (S24.2.1)

NHTSA	No Test Date:
Laborat	ory: Test Technician(s):
Booster	Seat Name, Model, and Manufacture Date:
	osition: Rearmost, mid-height Mid-position, mid-height Foremost, mid-height separate sheet for each of the three fore-aft positions.)
The b	pooster seat has NO visible damage. (S24.1.1)
	ed tests with a booster seat. (Booster seats listed in Appendix A, section D, S24.1.1)) Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S22.1.7.1) N/A – No lumbar adjustment
1.2.	Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S22.1.7.2)
1.3.	If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S22.1.7.3)
1.4	N/A – No independent fore-aft seat cushion adjustment Place the seat in the position specified in the header information. Use the seat markings determined during the completion of Data Sheet 14 to set the fore-aft position, mid-height position and the seat cushion angle.
1.5	The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S24.1.2 and S8.1.3)
1.6	Manufacturer's design seat back angle Tested seat back angle If adjustable, set the head restraint at the full down and full forward position. (S22.1.7.6) Any adjustment of the head restraint shall be used to position it full forward. For example, if it rotates, rotate it such that the head restraint extends as far forward as possible.
1.7	N/A – No head restraint adjustment Place any adjustable seat belt anchorages at the vehicle manufacturer's nominal design position for a 50th percentile adult male occupant (S22.2.1.6.1) N/A – No adjustable upper seat belt anchorage Manufacturer's specified anchorage position.
1.8	Tested anchorage position Locate and mark a vertical Plane A through the longitudinal centerline of the booster seat. (S22.2.1.2)
	Read the booster seat owner's manual for installation instructions Place the booster seat in the seat such that Plane A (item 1.8 above) is aligned with Plane B (determined and marked during the completion of Data Sheet 14). (S22.2.1.4(a)(1))
	While maintaining the booster seat with Plane A aligned with Plane B, secure the booster seat by following, to the extent possible, the booster seat manufacturer's directions regarding proper installation of the booster seat. Do NOT use any positioning devices such as towels. (FR 65 30711, footnote 23, 5/12/2000) If the vehicle has FMVSS 225 anchorages, do not attach (S22.1.3) the booster seat to these anchorages. (S22.2.1.4 (a)) Do NOT attach any tethers. (S24.1.4) Is the booster seat designed to be secured to the vehicle seat even when empty?

		Vac complete item 1.10
		Yes – complete item 1.12
		No – skip item 1.12
		Place a load cell with a maximum full-scale reading of 225 N (50.6 lb) on a flat, straight
		section of the lap belt between the booster seat belt path and the contact point with the
		belt anchor or vehicle seat, on the side away from the buckle (to avoid interference from
		the shoulder portion of the belt). (S22.2.1.6.1)
		Is there a sheath around the seat belt that interferes with the load cell?
		Yes No
		If necessary, cut off all or part of the sheath All Part
	1 13	Cinch the seat belt to a tension load of 130 N \pm 3N (29.2 lb \pm 0.7 lb) (S22.2.1.6.1)
_	•	Record seat belt tension
		N/A – The booster seat is not designed to be secured to the vehicle seat even when
		
	1 11	empty. Desition the 40 CER Port 572 Subport N.6 year old dummy in the heaster cost such that
	_1.14	Position the 49 CFR Part 572 Subpart N 6-year-old dummy in the booster seat such that
		the dummy's lower torso is centered on the booster seat cushion and the dummy's back
		is against the seat back of the booster seat or if there is no booster seat back, the vehicle
		seat back. Place the arms at the dummy's sides. (S22.2.1.6.2)
	_1.15	Attach all belts that come with the booster seat that are appropriate for a child of the
		same height and weight as the 6-year-old child dummy (45 in (114 cm), 51.6 lb (23.4 g)),
		if any, by following, to the extent possible, the manufacturer's instructions provided with
		the booster seat for seating children. (S22.2.1.6.3)
		N/A – No seat belts come with the booster seat.
		N/A – Seat belts that come with the booster seat are not applicable to a dummy this
		size and weight (45 in (114 cm), 51.6 lb (23.4 kg)).
	1.16	Place the Type 2 manual belt around the test dummy and fasten the latch. Remove all
		slack from the lap belt portion. Pull the upper torso webbing out of the retractor and allow
		it to retract; repeat this four times. Apply a 9 to 18 N (2 to 4lb) tension load to the lap belt.
		Allow the excess webbing in the upper torso belt to be retracted by the retractive force of
		the retractor. (S22.2.1.6.4)
		N/A – Booster seat belts that come with the booster seat are used to secure the
	4 4 7	dummy and the booster seat is secured with the vehicle's seat belt. (See 1.23)
	1.17	Start the vehicle engine or place the ignition in the "on" position, whichever will turn on
		the suppression system, and close all vehicle doors. (S22.2.1.7) Wait 10 seconds, and
		then check whether the air bag is suppressed. (S22.2.1.8)
		Air Bag Suppressed – Pass
		Air Bag Not Suppressed – FAIL
	1.18	Return the ignition switch to the "off" position.
2.	Unbe	elted tests using FMVSS 225 Anchorages with a booster seat. (Booster seats listed in
	Appe	endix A, sections D) – Do NOT attach seat belts. (S24.1.3) Do NOT attach any tethers.
		4.1.4(a))
	•	A - Vehicle does not have FMVSS 225 anchorages or booster seat does not have
	—	FMVSS 213 S5.9 devices to mate to the FMVSS 225 anchorages.
	2.1	Keep the same seat position as in 1.1 through 1.7 above
	2.2	Read the booster seat and vehicle owner's manuals for installation instructions
	_2.3	Attach the booster seat to the FMVSS 225 anchorages according to the instructions in
		the booster seat and the vehicle owner's manuals. Do NOT attach any tethers. (S22.1.4)
		Do NOT use any positioning devices such as towels. (FR 65 30711, footnote 23,
		5/12/2000)
	_2.46	Position the 49 CFR Part 572 Subpart N 6-year-old dummy in the booster seat such that
		the dummy's lower torso is centered on the booster seat cushion and the dummy's back
		is against the seat back of the booster seat or if there is no booster seat back, the vehicle
		seat back. Place the arms at the dummy's sides. (S22.2.1.6.2)
	2.5	Attach all belts that come with the booster seat that are appropriate for a child of the
	-	same height and weight as the 6-year-old child dummy (45 in (114 cm), 51.6 lb (23.4 kg)

	if any, by following, to the extent possible, the manufacturer's in the booster seat for seating children. (S22.2.1.6.3) N/A - No seat belts come with the booster seat.	·
	N/A – Seat belts that come with the booster seat are not app height and weight (45 in (114 cm), 51.6 lb (23.4 kg))	licable to a dummy this
2.6	Start the vehicle engine or place the ignition in the "on" position, the suppression system, and close all vehicle doors. (S22.2.1.7) then check whether the air bag is suppressed. (S22.2.1.8) Air Bag Suppressed – Pass Air Bag Not Suppressed – FAIL	
2.7	Return the ignition switch to the "off" position.	
I certify	that I have read and performed each instruction.	Date

DATA SHEET 21

	pression Tests Using an Unbelted 6-Year-Old Dummy (Part 572, Subpart N) (S24.2.1) No Test Date:
Laborat	tory: Test Technician(s):
Dummy	v Serial No
	osition: Rearmost, mid-height Mid-position, mid-height Foremost, mid-height separate sheet for each of the three fore-aft positions.)
Do NO	Γ use seat belts for these tests. (S22.2.2)
	ing on seat with back against seat back (S22.2.2.1) Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S22.1.7.1) N/A – No lumbar adjustment
1.2	Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S22.1.7.2)
1.3	If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S22.1.7.3)
1.4	Place the seat in the position specified in the header information. Use the seat markings determined during the completion of Data Sheet 14 to set the fore-aft position, mid-height position and the seat cushion angle.
1.5	The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S24.1.2 and S8.1.3) N/A - No seat back angle adjustment Manufacturer's design seat back angle Tested seat back angle
1.6	If adjustable, set the head restraint at the full down and full forward position. (S22.1.7.6) Any adjustment of the head restraint shall be used to position it full forward. For example, if it rotates, rotate it such that the head restraint extends as far forward as possible. N/A – No head restraint adjustment
1.7	Position the dummy in the seated position and place it on the right front outboard seat. (S22.2.2.1 (a))
1.8	Position the dummy such that its midsagittal plane is coincident with Plane B (determined and marked during the completion of Data Sheet 14). (S22.2.2.1(b))
	Position the dummy's torso against the seat back. (S22.2.2.1(b)) Position the dummy's thighs against the seat cushion. (S22.2.2.1(b)) Allow the legs of the dummy to extend off the surface of the seat. (S22.2.2.1(c)) If the seat must be moved rearward because of dummy contact with the instrument panel, describe the final location of the seat: N/A - No dummy contact with the instrument panel. Manual seat adjuster: detent(s) rearward of the forward most position (Move
1.12	the seat the minimum number of detents to eliminate contact with the instrument panel.) Power seat adjuster: mm between instrument panel and child restraint (max. allowed is 5 mm.) Rotate the dummy's upper arms until they contact the seat back. (S22.2.2.1(d))
	Rotate the dummy's lower arms until the dummy's hands contact the seat cushion. (S22.2.2.1 (e))

	Start the vehicle engine or place the ignition in the "on" position, whichever will turn on the suppression system, and close all vehicle doors. (S22.2.2.1(f)) Wait 10 seconds, and then check whether the air bag is suppressed. (S22.2.2.1(g)) Air Bag Suppressed – PassAir Bag Not Suppressed – FAIL Return the ignition switch to the "off" position.
1.13	Neturn the ignition switch to the on position.
	Sitting on seat with back against reclined seat back (S22.2.2.2) I/A – No seat back angle adjustment
	Keep the dummy and the seat in the same position as item 1 above. Recline the seat back an additional 25 degrees or the closest position that does not exceed 25 degrees. (S22.2.2.2) Initial seat back angle
2.3	Final seat back angle Verify the dummy's midsagittal plane is coincident with Plane B (determined and marked during the completion of Data Sheet 14). (S22.2.2.1(b))
2.4	Verify the dummy's torso is against the seat back. (\$22.2.2.1(b))
	Verify the dummy's thighs are against the seat cushion. (S22.2.2.1(b))
2.6	Allow the legs of the dummy to extend off the surface of the seat. (S22.2.2.1(c))
	If the seat must be moved rearward because of dummy contact with the instrument panel, describe the final location of the seat:
	N/A – No dummy contact with the instrument panel.
	Manual seat adjuster: detent(s) rearward of the forward most position (Move
	the seat the minimum number of detents to eliminate contact with the instrument panel.)
	Power seat adjuster: mm between instrument panel and child restraint (max. allowed is 5 mm.)
2.7	Verify the dummy's upper arms contact the seat back. (S22.2.2.1(d))
2.8 2.9	Verify the dummy's hands contact the seat cushion. (S22.2.2.1(e)) Start the vehicle engine or place the ignition in the "on" position, whichever will turn on
	the suppression system, and close all vehicle doors. (S22.2.2.1(f)) Wait 10 seconds, and
	then check whether the air bag is suppressed. (S22.2.2.1(g))
	Air Bag Suppressed – Pass
2 10	Air Bag Not Suppressed – FAIL Return the ignition switch to the "off" position.
2.10	return the ignition switch to the on position.
3.	Sitting on seat edge, spine vertical, hands by the dummy's side (S22.2.2.4)
3.1 3.2	Keep the seat in the end position used for 2 above.
3.2	Incline the seat back to the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S22.1.7.5 and
	S8.1.3)
	N/A – No seat back angle adjustment
	Manufacturer's design seat back angle Tested seat back angle
3.3	Position the dummy in the seated position and place it on the right front outboard seat.
	(S22.2.2.1(a))
3.4	Position the dummy such that its midsagittal plane is coincident with Plane B (determined
3.5	and marked during the completion of Data Sheet 14). (S22.2.2.4(a)) Position the dummy forward in the seat such that the legs are vertical and the back of the
0.0	legs rest against the front of the seat with the spine vertical. If the dummy's feet contact
	the floor pan raising part of the thighs off the seat cushion, rotate the legs forward until
	the dummy's thighs are resting on the seat cushion with the feet positioned flat on the
	floor pan and the dummy spine vertical. (S22.2.2.4(b)) If the seat must be moved rearward because of dummy contact with the instrument
	panel, describe the final location of the seat:
	N/A – No dummy contact with the instrument panel.

	Manual seat adjuster: detent(s) rearward of the forward most position (Move the seat the minimum number of detents to eliminate contact with the instrument
	panel.) Power seat adjuster: mm between instrument panel and child restraint (max. allowed is 5 mm.)
3.6 3.7 3.8	Position the dummy's upper arms parallel to the spine. (S22.2.2.4(c)) Rotate the dummy's lower arms until the hands contact the seat cushion. (S22.2.2.4(d)) If necessary, hold the dummy in position with a material that has a maximum breaking
3.9	strength of 311 N. (S22.2.2.4 (b)) Start the vehicle engine or place the ignition in the "on" position, whichever will turn on the suppression system, and close all vehicle doors. (S22.2.2.4(e)) Wait 10 seconds, and then check whether the air bag is suppressed. (S22.2.2.4(f)) Air Bag Suppressed – PassAir Bag Not Suppressed – FAIL
3.10	Return the ignition switch to the "off" position.
4. 4.1 4.2	Sitting back in the seat and leaning on the right front passenger door (S24.2.3) Keep the seat in the end position used for 3 above. Position the dummy in the seated position and place it on the right front outboard seat. (S24.2.3(a))
4.3 44	Position the dummy such that its midsagittal plane is coincident with Plane B (determined and marked during the completion of Data Sheet 14). (S24.2.3(a)) Position the dummy's back against the seat back and thighs on the seat cushion.
4.5	(S24.2.3(b)) Allow the legs and feet to extend off the surface of the seat. If this positioning of the dummy's legs is prevented by contact with the instrument panel, move the seat rearward.
	(S24.2.3(c)) If the seat must be moved rearward because of dummy contact with the instrument panel, describe the final location of the seat: N/A - No dummy contact with the instrument panel. Manual seat adjuster: detent(s) rearward of the forward most position (Move the seat the minimum number of detents to eliminate contact with the instrument panel.)
	Power seat adjuster: mm between instrument panel and child restraint (max. allowed is 5 mm.)
4.6	Rotate the dummy's upper arms toward the seat back until they make contact. (S24.2.3(d))
4.7 4.8	Rotate the dummy's lower arms down until they contact the seat. (S24.2.3(e)) Close the vehicle's passenger-side door and then start the vehicle engine or place the
4.9	ignition in the "on" position, whichever will turn on the suppression system. (S24.2.3 (f)) Push against the dummy's left shoulder to lean the dummy against the door; close all remaining doors. (S24.2.3 (g))
4.10	Wait 10 seconds, and then check whether the air bag is suppressed. (S24.2.3 (h))Air Bag Suppressed – Pass
4.11	Air Bag Not Suppressed – FAIL Return the ignition switch to the "off" position.
I certify	that I have read and performed each instruction. Date

DATA SHEET 22

estraint Name and Model:nditions to be specified by COTR.	t Technician(s):Separate Base? Base Used?			
nditions to be specified by COTR.	Base Used?			
	Handle Position? Sunshade?	In-use	N N Down Stowed	
restraint with a removable base shal	(circle test conditions) I be treated as two separat)	
ned tests with rearward facing child re			the	
Position the seat's adjustable lumbar retracted or deflated adjustment pos	r supports so that the lumb		t is in its	lowest
Position any adjustable parts of the s in the lowest or most open adjustme	nt position. (S20.4.1)	support s	o that th	ey are
If the seat cushion adjusts fore and a to the full rearward position. (S20.4.	aft, independent of the seat I)	back, se	t this adj	ustmen
Use the seat markings determined d foremost fore-aft position, mid-heigh	uring the completion of Dat t position and the seat cush	nion angle) .	
Manufacture	er's design seat back angle		 	_
If adjustable, set the head restraint a and S20.4.1) Any adjustment of the For example, if it rotates, rotate it suppossible.	It the full down and full forw head restraint shall be used that the head restraint e	d to positi	on it full	forward
Place any adjustable seat belt anch position for a 50th percentile adult m N/A – No adjustable upper seat b Manufacturer's specified anchorage	orages at the vehicle manu ale occupant (S20.4.7) elt anchorage	ıfacturer's	nomina	l desigi
Locate and mark a vertical Plane A t	hrough the longitudinal cer	nterline of	the child	t
If there is a handle, verify the handleN/A - No handle on the child restr				
If there is a sunshield, verify the suns N/A – No sunshield on the child re		sition.		
Read the child restraint owner's man Place the child restraint facing rearw If the child restraint is certified to an anchorage system as specifie	ard in the seat per the app S5.9 of FMVSS No. 213, and in FMVSS No. 225, attac	ropriate c AND the v ch the chi	/ehicle s ld restra	eat has int to th
	Position the seat's adjustable lumbar retracted or deflated adjustment pos N/A - No lumbar adjustment Position any adjustable parts of the sin the lowest or most open adjustme N/A - No additional support adjust the seat cushion adjusts fore and at to the full rearward position. (S20.4.7 N/A - No independent fore-aft set Use the seat markings determined deforemost fore-aft position, mid-heigh The seat back angle, if adjustable, is position for a 50th percentile adult me (S20.4.1) N/A - No seat back angle adjustme Tested seat If adjustable, set the head restraint at and S20.4.1) Any adjustment of the For example, if it rotates, rotate it suppossible N/A - No head restraint adjustme Place any adjustable seat belt anch position for a 50th percentile adult me N/A - No adjustable upper seat belt anch position for a 50th percentile adult me N/A - No adjustable upper seat belt anch position for a 50th percentile adult me N/A - No adjustable upper seat belt anch position for a 50th percentile adult me N/A - No adjustable upper seat belt anch position for a 50th percentile adult me N/A - No adjustable upper seat belt anch position for a 50th percentile adult me N/A - No adjustable upper seat belt anch position for a 50th percentile adult me N/A - No adjustable upper seat belt anch position for a 50th percentile adult me Tested anchorage position Locate and mark a vertical Plane A trestraint. (S20.4.3) If there is a handle, verify the handle N/A - No sunshield on the child restrated be child restraint owner's mar Place the child restraint facing rearw If the child restraint is certified to an anchorage system as specific	Position the seat's adjustable lumbar supports so that the lumb retracted or deflated adjustment position. (S20.4.1)	retracted or deflated adjustment position. (S20.4.1) N/A – No lumbar adjustment Position any adjustable parts of the seat that provide additional support in the lowest or most open adjustment position. (S20.4.1) N/A – No additional support adjustment If the seat cushion adjusts fore and aft, independent of the seat back, set to the full rearward position. (S20.4.1) N/A – No independent fore-aft seat cushion adjustment Use the seat markings determined during the completion of Data Sheet foremost fore-aft position, mid-height position and the seat cushion angle The seat back angle, if adjustable, is set at the manufacturer's nominal doposition for a 50th percentile adult male in the manner specified by the m (S20.4.1) N/A – No seat back angle adjustment Manufacturer's design seat back angle Tested seat back angle If adjustable, set the head restraint at the full down and full forward position and S20.4.1) Any adjustment of the head restraint shall be used to position example, if it rotates, rotate it such that the head restraint extends as possible. N/A – No head restraint adjustment Place any adjustable seat belt anchorages at the vehicle manufacturer's position for a 50th percentile adult male occupant (S20.4.7) N/A – No adjustable upper seat belt anchorage Manufacturer's specified anchorage position. Tested anchorage position Locate and mark a vertical Plane A through the longitudinal centerline of restraint. (S20.4.3) If there is a handle, verify the handle is in the specified position. N/A – No handle on the child restraint Tested sunshield position Read the child restraint owner's manual for installation instructions. Place the child restraint is certified to S5.9 of FMVSS No. 213, AND the x an anchorage system as specified in FMVSS No. 225, attach the child restraint is certified to S5.9 of FMVSS No. 225, attach the child vehicle seat anchorage. Do not attach the vehicle seat belt. Do NO	Position the seat's adjustable lumbar supports so that the lumbar support is in its retracted or deflated adjustment position. (S20.4.1) N/A — No lumbar adjustment Position any adjustable parts of the seat that provide additional support so that the in the lowest or most open adjustment position. (S20.4.1) N/A — No additional support adjustment If the seat cushion adjusts fore and aft, independent of the seat back, set this adjust to the full rearward position. (S20.4.1) N/A — No independent fore-aft seat cushion adjustment Use the seat markings determined during the completion of Data Sheet 14 to set foremost fore-aft position, mid-height position and the seat cushion angle. The seat back angle, if adjustable, is set at the manufacturer's nominal design ric position for a 50th percentile adult male in the manner specified by the manufact (S20.4.1) N/A — No seat back angle adjustment Manufacturer's design seat back angle Tested seat back angle If adjustable, set the head restraint at the full down and full forward position. (S20 and S20.4.1) Any adjustment of the head restraint shall be used to position it full For example, if it rotates, rotate it such that the head restraint extends as far forw possible. N/A — No head restraint adjustment Place any adjustable seat belt anchorages at the vehicle manufacturer's nominal position for a 50th percentile adult male occupant (S20.4.7) N/A — No adjustable upper seat belt anchorage Manufacturer's specified anchorage position. Ested anchorage position. Locate and mark a vertical Plane A through the longitudinal centerline of the child restraint. (S20.4.3) If there is a handle, verify the handle is in the specified position. N/A — No handle on the child restraint Tested handle position Read the child restraint facing rearward in the seat per the appropriate condition. If the child restraint towner's manual for installation instructions. Place the child restraint facing rearward in the seat per the appropriate condition. If the child restraint is certifi

12. 12.	(detern restrair direction (S20.4 30711, 3 Place a straigh point winterfer	nined and mant by following ons regarding .5 and S20.4. footnote 23, a load cell with the belt arence from the	arked during the cong, to the extent porposer installation (7) Do NOT use a 5/12/2000) Do NOT in a maximum fuller lap belt between chor or vehicle see shoulder portion	with Plane A (item 8) aligned with Plane B ompletion of Data Sheet 14), secure the child essible, the child restraint manufacturer's n of the restraint in the rear facing mode. any positioning devices such as towels. (FR 65 OT attach any tethers. (S20.1.8) -scale reading of 225 N (50.6 lb) on a flat, en the child restraint belt path and the contact eat, on the side away from the buckle (to avoid n of the belt). (S20.4.7) the belt that interferes with the load cell?	
		If yes, c	ut off all or part of	f the sheath.	
12.		the seat belt to		$_$ All $_$ Part of 130 N \pm 3N (29.2 lb \pm 0.7 lb) (S20.4.7)	
13.	Position the	e 49 CFR Par	rt 572 Subpart R 1	12-month-old CRABI dummy in the child	
14.	the child re NOT readju dummy cor If the seat i instrument Ma the pai Po res Re Re Record the (Provided b	straint. (S20.4 ust the tension tact.) must be move panel, description N/A — No duratural seat adjusted the minual seat adjustraint (max. all-cinch the seat cord seat beliptical seat seat seat seat seat seat seat seat	4.8) (The tension in unless the fore-ced rearward because the final location may or child restruster: detent(simum number of center is tension by ment and timing in unless the center is tension by ment and timing in unless the center is tension by ment and timing in unless the center is tension by ment and timing in unless the center is the center	ble, the manufacturer's instructions provided with in the seat belt may change from item 12.4. Duraft position of the seat changes because of the use of dummy or child restraint contact with the on of the seat: raint contact with the instrument panel. The instrument panel is rearward of the forward most position (Move detents to eliminate contact with the instrument when instrument panel and dummy or child in load of 130 N \pm 3N (29.2 lb \pm 0.7 lb) (S20.4.7 grequirements in the chart below.	e t
;	Stage No.	Firing Time	<u>'</u>	Recorded Firing Time (msec)	
-	1	0.0 msec	(Time Zero)		
<u> </u>			ed from Time Zero		
16.	Connect du operation.	ummy instrum	nentation to the te	est data acquisition system and verify channel	
17.	Connect th	e airbag to thy the COTR.	e airbag firing sys	stem per the manufacturer's instructions,	
18.	Prepare the	e high-speed	video/film camera		
19. 20.				ecord the data from the dummy instrumentation	١.
21.					

__22. Record injury values for this test.

	FMVSS 208 Maximum	Measured Value*
	Allowable Injury Assessment	Dummy Serial No
	Value	
HIC ₁₅	390	
Chest Acceleration	50 g	
Peak Nij (Nte)	1.0	
Time (ms)	NA	
Peak Nij (Ntf)	1.0	
Time (ms)	NA	
Peak Nij (Nce)	1.0	
Time (ms)	NA	
Peak Nij (Ncf)	1.0	
Time (ms)	NA	
Neck Tension (Fz)	780 N	
Neck Compression	960 N	
(Fz)		

^{*}Calculated on data recorded for 125 ms after the initiation of the final stage of air bag deployment designed to deploy in any full frontal rigid barrier crash up to 64 km/h. (S4.11(c))

I certify that I have read and performed each instruction.	Date	

DATA SHEET 23 Low Risk Deployment Tests Using an Unbelted 3-Year-Old Dummy (Part 572, Subpart P) (S22) Position 1 - Chest On Instrument Panel (S22.4.2) Test Date: ____ NHTSA No. Laboratory: _____ Test Technician(s): _____ Dummy Serial No. Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S22.4.2.1) N/A – No lumbar adjustment Position any adjustable parts of the seat that provide additional support so that they are _2. in the lowest or most open adjustment position. (S22.4.2.1) N/A – No additional support adjustment __3. If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (\$22.4.2.1) N/A – No independent fore-aft seat cushion adjustment _4. Use the seat markings determined during the completion of Data Sheet 14 to set the rearmost fore-aft position, lowest height position and the seat cushion angle. The seat back angle, if adjustable, is set at the manufacturer's nominal design riding __5. position for a 50th percentile adult male in the manner specified by the manufacturer. (S22.4.2.1 and S8.1.3) __ N/A – No seat back angle adjustment Manufacturer's design seat back angle Tested seat back angle If adjustable, set the head restraint at the full down and full forward position. (S22.4.2.1) 6. Any adjustment of the head restraint shall be used to position it full forward. For example, if it rotates, rotate it such that the head restraint extends as far forward as possible. N/A – No head restraint adjustment Position a calibrated Part 572 Subpart P three-year-old dummy in the seated position and 7. place it on the right front outboard seat. (S22.4.2.2) __8. Position the dummy such that its midsagittal plane is coincident with Plane D (determined and marked during the completion of Data Sheet 14). (S22.4.2.2.1) __9. Position the dummy's legs in a vertical orientation and place the calves in contact with the seat cushion. (S22.4.2.2.2) 10. Position the upper arms parallel to the torso, and place the hands in contact with the thighs. (S22.4.2.2.3) Without changing the seat position, position the dummy torso so the rear face of the thorax instrument cavity is vertical. (S22.4.2.2.3) Thorax instrument cavity angle _____ Thigh Angle 12. Move the dummy forward on the seat, maintaining the thorax instrument cavity and thigh angles, until the dummy head/torso contacts the instrument panel. If the dummy loses contact with the seat maintain the height and angles until head/torso contact with the instrument panel occurs. (S22.4.2.3) Adjust the dummy thighs and legs the minimum amount necessary to ensure torso/head contact with the instrument panel when the dummy is moved forward. (S22.4.2.2.2) ____Leg/thigh adjustments needed Thigh Angle 13. Adjust the dummy position vertically until Point 1(determined and marked during the completion of Data Sheet 14) lies in Plane C (determined and marked during the completion of Data Sheet 14). Adjust the fore/aft position of the dummy to maintain

contact with the instrument panel. If the head of the dummy contacts the windshield

		before point 1 reaches Plane C, lower the dummy to achieve a maximum clearance of 5mm (0.2 inches) between the head and the windshield. (S22.4.2.3)				
		Point 1 Lies within Plane				
	I	Head Contacted Windshie	eld Height of Point 1			
			Head/ windshield Clearance	mm		
1	Verify dum	my legs are vertical. (S22	2.4.2.4)			
1			if possible, otherwise, position feet para	llel to the		
	floor pan. (S22.4.2.4)				
		Feet placed on floor pan				
		Feet placed parallel to flo	oor pan			
			floor pan to heel mm			
10	6. Using mate		aking strength of 311 \overline{N} (70 lb) and space	er blocks.		
			minimum interference with the full rotation			
			orso of the dummy. The material should			
			ld not interfere with the airbag (S22.4.2.			
		Photograph final setup ar		-,		
		Thorax Cavi				
		Thigh Angle				
		Point 1 Heig				
1	7. Record the		iming requirements in the chart below.			
	Number of	stages for this test.				
	Stage No.	Firing Time (msec) *	Recorded Firing Time (msec)			
	1	0.0 msec (Time Zero)				
	Į į	0.0 msec (Time Zero))			
	* E	·	7 (11 (
		e is measured from Time				
1		immy instrumentation to t	the test data acquisition system and veri	ty channel		
	operation.					
1			ng system per the manufacturer's instruc	tions,		
		the COTR.				
		e high-speed video/film ca				
			and record the data from the dummy inst	rumentation.		
		the post-test results	pecified firing times +/- 2 milliseconds.			
2						

__24. Record injury values for this test.

	FMVSS 208 Maximum Allowable Injury Assessment Value	Measured Value* Dummy Serial No
HIC ₁₅	570	
Chest Acceleration	55 g	
Chest Displacement	34 mm	
Peak Nij (Nte)	1.0	
Time (ms)	NA	
Peak Nij (Ntf)	1.0	
Time (ms)	NA	
Peak Nij (Nce)	1.0	
Time (ms)	NA	
Peak Nij (Ncf)	1.0	
Time (ms)	NA	
Neck Tension (Fz)	1130 N	
Neck Compression (Fz)	1380 N	

1 100K Comprocolom	100011	
(Fz)		
*Calculated on data recor	ded for 100 ms after the initial deploy	yment of the air bag. (S4.11(b))
I certify that I have read a	and performed each instruction.	Date

DATA SHEET 24

Low Risk Deployment Tests Using an Unbelted 3-Year-Old Dummy (Part 572, Subpart P) (S22)

Position 2 -. Head On Instrument Panel (S22.4.3)

NHTSA No. ______ Test Date: ______

Laboratory: _____ Test Technician(s): ______

Laborat	ory: Test Technician(s):
Dummy	Serial No
1.	Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S22.4.3.1)
2.	N/A – No lumbar adjustment Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S22.4.3.1)
3.	N/A – No additional support adjustment If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S22.4.3.1)
4.	N/A – No independent fore-aft seat cushion adjustment Use the seat markings determined during the completion of Data Sheet 14 to set the rearmost fore-aft position, lowest height position and the seat cushion angle.
5.	The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S22.4.3.1 and S8.1.3)
	N/A – No seat back angle adjustment Manufacturer's design seat back angle Tested seat back angle
6.	If adjustable, set the head restraint at the full down and full forward position. (S22.4.3.1) Any adjustment of the head restraint shall be used to position it full forward. For example, if it rotates, rotate it such that the head restraint extends as far forward as possible.
7.	N/A – No head restraint adjustment Position a calibrated Part 572 Subpart P three-year-old dummy in the seated position and
8.	place it on the right front outboard seat. (S22.4.3.2) Position the dummy such that its midsagittal plane is coincident with Plane D (determined
9.	and marked during the completion of Data Sheet 14). (S22.4.3.2.1) Position the dummy's legs in a vertical orientation and place the back of the legs in contact with the seat cushion. (S22.4.3.2.2)
10.	If the thighs do not rest fully on the seat cushion, position the legs by rotating them forward and placing the feet flat on the floor pan until the thighs rest fully on the seat cushion.
11.	Set the transverse distance between the longitudinal centerlines at the front of the knees at 86 to 91 mm (3.4 to 3.6 inches). Maintain the legs and thighs in a vertical plane. (\$22.4.3.2.2)
	Knee Separation DistanceThigh Angle
12.	Position the dummy torso so the rear face of the thorax instrument cavity is vertical. (\$22.4.3.2.2.)
13.	Thorax instrument cavity angle Position the upper arms parallel to the torso, and place the hands in contact with the
	thighs. (S22.4.3.2.3)
14.	Move the seat forward while maintaining the thorax instrument cavity angle until any part of the dummy contacts the instrument panel. (S22.4.3.3) No contact. Proceed to step 15Contact. Proceed to step 16

15	angles, and	Move the dummy forward on the seat, maintaining the thorax instrument cavity and thigh angles, and dummy height until any part of the dummy contacts the instrument panel. (S22.4.3.4)						
16	Verify contact between the instrument panel and the head or torso. If necessary, rotate the torso forward until the head or torso contacts the instrument panel. Achieve this position by maintaining the thighs at there present angle and apply a forward force to the							
17	spine between the shoulder joints. (S22.4.3.5)					he		
			Thorax Cavity An	igle	degrees			
18	. Record the Number of			requiremen	degrees nts in the chart below.			
	Stage No.	Firing Tir	me (msec) *	Recorded	Firing Time (msec)			
	1	0.0 msec	(Time Zero)					
L								
19			ured from Time Zero rumentation to the te		es uisition system and verify channel			
20	•	e airhag to	the airbag firing sys	tem ner the	manufacturer's instructions,			
	provided by			tom por the	manadataror o motraotiono,			
21			ed video/film camera	as.				
22					ta from the dummy instrumentation	on.		
23	. Photograph	the post-	J 1					
	24. Verify recorded firing times match specified firing times +/- 2 milliseconds.							
		rded firing	times match specifie	ed firing time	es +/- 2 milliseconds.			
24 25		rded firing iry values	times match specification for this test.					
		rded firing iry values FN	times match specification for this test. IVSS 208 Maximum	1	Measured Value*			
		rded firing Iry values FN All	times match specific for this test. IVSS 208 Maximum lowable Injury Asse	1				
25	. Record inju	rded firing Iry values FN All	times match specific for this test. IVSS 208 Maximum lowable Injury Asse lue	1	Measured Value*			
25	Record inju	rded firing iry values FN All Va	times match specification this test. IVSS 208 Maximum alowable Injury Assertate 570	1	Measured Value*			
25	Record inju	rded firing iry values FN All Va	times match specifie for this test. IVSS 208 Maximum lowable Injury Asse lue 570 55 g	1	Measured Value*			
HIC Ch	Record inju	rded firing iry values FN All Va	times match specified for this test. IVSS 208 Maximum lowable Injury Asselue 570 55 g 34 mm	1	Measured Value*			
HIC Ch Ch Pe	Record inju	rded firing iry values FN All Va	times match specified for this test. IVSS 208 Maximum lowable Injury Asselue 570 55 g 34 mm 1.0	1	Measured Value*			
25	Record inju	rded firing iry values FN All Va	times match specified for this test. IVSS 208 Maximum lowable Injury Asselue 570 55 g 34 mm 1.0 NA	1	Measured Value*			
HIG Ch Ch Pe Tin Pe	Record injunctions of the control of	rded firing iry values FN All Va	times match specified for this test. IVSS 208 Maximum lowable Injury Asselue 570 55 g 34 mm 1.0 NA 1.0	1	Measured Value*			
HIG Ch Ch Pe Tin	est Accelerations Acceleration	rded firing iry values FN All Va	times match specified for this test. IVSS 208 Maximum lowable Injury Asselue 570 55 g 34 mm 1.0 NA 1.0 NA	1	Measured Value*			
25 HIG Ch Ch Pe Tin Pe	est Acceleration est Displacem ak Nij (Nte) ne (ms) ak Nij (Ntf) ne (ms) ak Nij (Ntf)	rded firing iry values FN All Va	times match specified for this test. IVSS 208 Maximum lowable Injury Asselue 570 55 g 34 mm 1.0 NA 1.0	1	Measured Value*			
HIG Ch Ch Pe Tin Pe Tin	est Acceleration est Displacem ak Nij (Nte) ne (ms) ak Nij (Ntf) ne (ms) ak Nij (Nce) ne (ms)	rded firing iry values FN All Va	times match specified for this test. IVSS 208 Maximum lowable Injury Asselue 570 55 g 34 mm 1.0 NA 1.0 NA 1.0	1	Measured Value*			
25 HIC Ch Ch Pe Tin Pe Tin Pe Tin Pe	est Acceleration est Displacem ak Nij (Nte) ne (ms) ak Nij (Ntf) ne (ms) ak Nij (Ntf)	rded firing iry values FN All Va	times match specified for this test. IVSS 208 Maximum lowable Injury Asselue 570 55 g 34 mm 1.0 NA 1.0 NA 1.0 NA	1	Measured Value*			
25 HIC Ch Ch Pe Tin Pe Tin Pe Tin Pe Tin	est Acceleration est Displacem ak Nij (Nte) ne (ms) ak Nij (Ntf) ne (ms) ak Nij (Nce) ne (ms) ak Nij (Nce) ne (ms)	rded firing iry values FN All Va on ent	times match specified for this test. IVSS 208 Maximum lowable Injury Asselue 570 55 g 34 mm 1.0 NA	1	Measured Value*			
HIG Ch Ch Pe Tin Pe Tin Pe Tin Ne Ne	est Acceleration est Displacem ak Nij (Nte) ne (ms) ak Nij (Nte) ne (ms) ak Nij (Nce) ne (ms) ak Nij (Ncf) ne (ms) ck Tension (Fack Compression	rded firing iry values FN All Va on ent	times match specified for this test. IVSS 208 Maximum lowable Injury Asselue 570 55 g 34 mm 1.0 NA 1.0 NA 1.0 NA 1.0 NA 1.0 NA 1.0 NA	1	Measured Value*			
HIG Ch Ch Pe Tin Pe Tin Pe Tin Ne Ne (Fz	est Acceleration est Displacem ak Nij (Nte) ne (ms) ak Nij (Nte) ne (ms) ak Nij (Nce) ne (ms) ak Nij (Ncf) ne (ms) ck Tension (Fack Compression	rded firing Iry values FN All Va on ent z) on	times match specified for this test. IVSS 208 Maximum lowable Injury Asselue 570 55 g 34 mm 1.0 NA	essment	Measured Value* Dummy Serial No			
HIG Ch Ch Pe Tin Pe Tin Pe Tin Ne Ne (Fz	est Acceleration est Displacem ak Nij (Nte) ne (ms) ak Nij (Nte) ne (ms) ak Nij (Nce) ne (ms) ak Nij (Ncf) ne (ms) ck Tension (Fack Compression	rded firing Iry values FN All Va on ent z) on	times match specified for this test. IVSS 208 Maximum lowable Injury Asselue 570 55 g 34 mm 1.0 NA	essment	Measured Value*			
HIG Ch Ch Pe Tin Pe Tin Pe Tin Ne Ne (Fz	est Acceleration est Displacem ak Nij (Nte) ne (ms) ak Nij (Nte) ne (ms) ak Nij (Nce) ne (ms) ak Nij (Ncf) ne (ms) ck Tension (Fack Compression	rded firing Iry values FN All Va on ent z) on	times match specified for this test. IVSS 208 Maximum lowable Injury Asselue 570 55 g 34 mm 1.0 NA	essment	Measured Value* Dummy Serial No			
HIG Ch Ch Pe Tin Pe Tin Pe Tin Ne Ne (Fz	est Acceleration est Displacem ak Nij (Nte) ne (ms) ak Nij (Nte) ne (ms) ak Nij (Nce) ne (ms) ak Nij (Ncf) ne (ms) ck Tension (Fack Compression	rded firing Iry values FN All Va on ent z) on	times match specified for this test. IVSS 208 Maximum lowable Injury Asselue 570 55 g 34 mm 1.0 NA	essment	Measured Value* Dummy Serial No			
HIG Ch Ch Pe Tin Pe Tin Pe Tin Ne Ne (Fz	est Acceleration est Displacem ak Nij (Nte) ne (ms) ak Nij (Nte) ne (ms) ak Nij (Nce) ne (ms) ak Nij (Ncf) ne (ms) ck Tension (Fack Compression	rded firing Iry values FN All Va on ent z) on	times match specified for this test. IVSS 208 Maximum lowable Injury Asselue 570 55 g 34 mm 1.0 NA	essment	Measured Value* Dummy Serial No			
HIG Ch Ch Pe Tin Pe Tin Pe Tin Ne Ne (Fz	est Acceleration est Displacem ak Nij (Nte) ne (ms) ak Nij (Nte) ne (ms) ak Nij (Nce) ne (ms) ak Nij (Ncf) ne (ms) ck Tension (Fack Compression	rded firing Iry values FN All Va on ent z) on	times match specified for this test. IVSS 208 Maximum lowable Injury Asselue 570 55 g 34 mm 1.0 NA	essment	Measured Value* Dummy Serial No			

DATA SHEET 25 Low Risk Deployment Tests Using an Unbelted 6-Year-Old Dummy (Part 572, Subpart N) (S24) Position 1 - Chest On Instrument Panel (S24.4.2) NHTSA No. ____ Test Date: Laboratory: _____ Test Technician(s): ____ Dummy Serial No. Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S24.4.2.1) N/A – No lumbar adjustment Position any adjustable parts of the seat that provide additional support so that they are _2. in the lowest or most open adjustment position. (S24.4.2.1) N/A – No additional support adjustment __3. If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (\$24.4.2.1) N/A – No independent fore-aft seat cushion adjustment 4. Use the seat markings determined during the completion of Data Sheet 14 to set the rearmost fore-aft position, lowest height position and the seat cushion angle. (S24.4.2.1) The seat back angle, if adjustable, is set at the manufacturer's nominal design riding __5. position for a 50th percentile adult male in the manner specified by the manufacturer. (S24.4.2.1 and S8.1.3) __ N/A – No seat back angle adjustment Manufacturer's design seat back angle Tested seat back angle If adjustable, set the head restraint at the full down and full forward position. (S24.4.2.1 6. and S22.1.7.6) Any adjustment of the head restraint shall be used to position it full forward. For example, if it rotates, rotate it such that the head restraint extends as far forward as possible. N/A – No head restraint adjustment Remove the dummy legs at the pelvic interface. (S24.4.2.2) 7. Position a calibrated Part 572 Subpart N six year old dummy in the seated position and 8. place it on the front passenger outboard seat. (S24.4.2.3) 9. Position the dummy such that its midsagittal plane is coincident with Plane D. 10. Position the upper arms parallel to the torso, and place the hands in contact with the thighs. (S24.4.2.3(b)) Position the dummy torso so the rear face angle of the thorax instrument cavity is 6 degrees forward of vertical. (S24.4.2.3(c)) Thorax instrument cavity angle Move the dummy forward on the seat, maintaining the thorax instrument cavity angle, until the dummy head/torso contacts the instrument panel. If the dummy loses contact with the seat maintain the height and angle until head/torso contact with the instrument panel occurs. (S24.4.2.3(c)) 13. Adjust the dummy position vertically until Point 1 lies with Plane C. Adjust the fore/aft position of the dummy to maintain contact with the instrument panel. If the head of the dummy contacts the windshield before point 1 reaches Plane C. lower the dummy to achieve a maximum clearance of 5mm (0.2 inches) between the head and the windshield. (S24.4.2.3(c)) __ Point 1 Lies within Plane C. Height of Point 1. ____mm Head Contacted Windshield Height of Point 1. ____mm Head/ windshield

Clearance.

____ mm

	Support the translation torso rathe	Support the dummy so that there is minimum interference with the full rotational and translational freedom for the upper torso of the dummy. The material should support the torso rather than the head and should not interfere with the airbag (S22.4.2.4) ———————————————————————————————————				
	15. Record the	Point 1 Height Airbag deployment and timin	g requiremen	mm ts in the chart below.		
	Number of	stages for test.	_			
	Stage No.	Firing Time (msec) *	Recorded	Firing Time (msec)		
	1	0.0 msec (Time Zero)		3 - (,		
		,				
	* Firing tin	ne is measured from Time Zer	o for all stage	es		
		ummy instrumentation to the t	est data acqu	isition system and verify channel		
	operation.					
		e airbag to the airbag firing sy	stem per the	manufacturer's instructions,		
		y the COTR.				
		e high-speed video/film came		a from the dummy instrumentatio	n	
		n the post-test results	ecord the dat	a nom the duming instrumentation	11.	
		rded firing times match specif	ied firing time	s +/- 2 milliseconds		
		ary values for this test.	iod illing tillio	o 17 2 minocoondo.		
_	,	,				
		FMVSS 208 Maximu	n	Measured Value*		
		Allowable Injury Ass	essment	Dummy Serial No		
		Value	essment	Dummy Serial No		
F	HIC ₁₅		essment	Dummy Serial No		
	HIC ₁₅ Chest Accelerati	Value 700	essment	Dummy Serial No		
(Value 700 on 60 g	essment	Dummy Serial No		
(Chest Accelerati	Value 700 on 60 g	essment	Dummy Serial No		
(F	Chest Accelerati Chest Displacem Peak Nij (Nte) Fime (ms)	Value 700 on 60 g eent 40 mm	essment	Dummy Serial No		
(F	Chest Accelerati Chest Displacem Peak Nij (Nte) Fime (ms) Peak Nij (Ntf)	Value 700 on 60 g eent 40 mm 1.0 NA 1.0	essment	Dummy Serial No		
() 	Chest Accelerati Chest Displacem Peak Nij (Nte) Fime (ms) Peak Nij (Ntf) Fime (ms)	Value 700 on 60 g nent 40 mm 1.0 NA	essment	Dummy Serial No		
() F F	Chest Accelerati Chest Displacem Peak Nij (Nte) Fime (ms) Peak Nij (Ntf) Fime (ms) Peak Nij (Nce)	Value 700 on 60 g eent 40 mm 1.0 NA 1.0 NA 1.0 NA 1.0 NA	essment	Dummy Serial No		
F	Chest Acceleration Chest Displacem Peak Nij (Nte) Fime (ms) Peak Nij (Ntf) Fime (ms) Peak Nij (Nce) Fime (ms)	Value 700 on 60 g tent 40 mm 1.0 NA 1.0 NA 1.0 NA 1.0 NA	essment	Dummy Serial No		
F	Chest Acceleration Chest Displacem Peak Nij (Nte) Fime (ms) Peak Nij (Ntf) Fime (ms) Peak Nij (Nce) Fime (ms) Peak Nij (Nce) Fime (ms) Peak Nij (Ncf)	Value 700 on 60 g ient 40 mm 1.0 NA	essment	Dummy Serial No		
F F	Chest Acceleration Chest Displacem Peak Nij (Nte) Fime (ms) Peak Nij (Ntf) Fime (ms) Peak Nij (Nce) Fime (ms) Peak Nij (Ncf) Fime (ms) Peak Nij (Ncf) Fime (ms)	Value 700 on 60 g ient 40 mm 1.0 NA 1.0 NA 1.0 NA 1.0 NA 1.0 NA 1.0 NA	essment	Dummy Serial No		
F	Chest Acceleratichest Displacem Peak Nij (Nte) Fime (ms) Peak Nij (Ntf) Fime (ms) Peak Nij (Nce) Fime (ms) Peak Nij (Ncf) Fime (ms) Peak Nij (Ncf) Fime (ms) Neck Tension (F	Value 700 60 g eent 40 mm 1.0 NA 1490 N	essment	Dummy Serial No		
(Chest Acceleration Chest Displacem Peak Nij (Nte) Fime (ms) Peak Nij (Ntf) Fime (ms) Peak Nij (Nce) Fime (ms) Peak Nij (Ncf) Fime (ms) Peak Nij (Ncf) Fime (ms) Neck Tension (F	Value 700 60 g eent 40 mm 1.0 NA 1490 N	essment	Dummy Serial No		
(Chest Acceleration Chest Displacem Peak Nij (Nte) Fime (ms) Peak Nij (Ntf) Fime (ms) Peak Nij (Nce) Fime (ms) Peak Nij (Ncf) Fime (ms) Peak Nij (Ncf) Fime (ms) Neck Tension (F Neck Compressi Fz)	Value 700 60 g eent 40 mm 1.0 NA 1.0 NA 1.0 NA 1.0 NA 2 1490 N 1820 N				
(Chest Acceleration Chest Displacem Peak Nij (Nte) Fime (ms) Peak Nij (Ntf) Fime (ms) Peak Nij (Nce) Fime (ms) Peak Nij (Ncf) Fime (ms) Peak Nij (Ncf) Fime (ms) Neck Tension (F Neck Compressi Fz)	Value 700 60 g eent 40 mm 1.0 NA 1.0 NA 1.0 NA 1.0 NA 2 1490 N 1820 N		Dummy Serial No yment of the air bag. (S4.11(b))		
(Chest Acceleration Chest Displacem Peak Nij (Nte) Fime (ms) Peak Nij (Ntf) Fime (ms) Peak Nij (Nce) Fime (ms) Peak Nij (Ncf) Fime (ms) Peak Nij (Ncf) Fime (ms) Neck Tension (F Neck Compressi Fz)	Value 700 60 g eent 40 mm 1.0 NA 1.0 NA 1.0 NA 1.0 NA 2 1490 N 1820 N				
(Chest Acceleration Chest Displacem Peak Nij (Nte) Fime (ms) Peak Nij (Ntf) Fime (ms) Peak Nij (Nce) Fime (ms) Peak Nij (Ncf) Fime (ms) Peak Nij (Ncf) Fime (ms) Neck Tension (F Neck Compressi Fz)	Value 700 60 g eent 40 mm 1.0 NA 1.0 NA 1.0 NA 1.0 NA 2 1490 N 1820 N				
(Chest Acceleration Chest Displacem Peak Nij (Nte) Fime (ms) Peak Nij (Ntf) Fime (ms) Peak Nij (Nce) Fime (ms) Peak Nij (Ncf) Fime (ms) Peak Nij (Ncf) Fime (ms) Neck Tension (F Neck Compressi Fz)	Value 700 60 g eent 40 mm 1.0 NA 1.0 NA 1.0 NA 1.0 NA 2 1490 N 1820 N				
(Chest Acceleration Chest Displacem Peak Nij (Nte) Fime (ms) Peak Nij (Ntf) Fime (ms) Peak Nij (Nce) Fime (ms) Peak Nij (Ncf) Fime (ms) Peak Nij (Ncf) Fime (ms) Neck Tension (F Neck Compressi Fz)	Value 700 60 g eent 40 mm 1.0 NA 1.0 NA 1.0 NA 1.0 NA 2 1490 N 1820 N				

DATA SHEET 26

Low Risk Deployment Tests Using an Unbelted 6-Year-Old Dummy (Part 572, Subpart N) (S24)

Position 2 - Head On Instrument Panel (S24.4.3)

Test Date: NILITO A NA

NHISA	No Test Date:
Labora	tory: Test Technician(s):
Dummy	Serial No
1.	Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S24.4.3.1) N/A – No lumbar adjustment
2.	Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S24.4.3.1) N/A – No additional support adjustment
3.	If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S24.4.3.1)
4.	Use the seat markings determined during the completion of Data Sheet 14 to set the rearmost fore-aft position, mid-height position and the seat cushion angle. (S24.4.3.1)
5.	The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S24.4.3.1 and S8.1.3) N/A - No seat back angle adjustment Manufacturer's design seat back angle
6.	Tested seat back angle If adjustable, set the head restraint at the full down and full forward position. (S24.4.3.1) Any adjustment of the head restraint shall be used to position it full forward. For example, if it rotates, rotate it such that the head restraint extends as far forward as possible.
7.	N/A – No head restraint adjustment Position a calibrated Part 572 Subpart N six-year-old dummy in the seated position and place it on the right front outboard passenger seat. (\$24.4.3.2)
8.	Position the dummy such that its midsagittal plane is coincident with Plane D. (S24.4.3.2(a))
9.	Position the dummy's legs in a vertical orientation and place the back of the legs in contact with the seat cushion. (S24.4.3.2(b))
10.	If the thighs do not rest fully on the seat cushion, position the legs by rotating them forward and placing the feet flat on the floor pan until the thighs rest fully on the seat cushion.
11.	Set the transverse distance between the longitudinal centerlines at the front of the knees at 112 to 117 mm (4.4 to 4.6 inches). Maintain the legs and thighs in a vertical plane. (S24.4.3.2(b))
	Knee Separation Distance Thigh Angle
12.	Position the dummy Torso so the rear face of the thorax instrument cavity is 6 degrees forward of vertical. (S24.4.3.2(b)) Thorax instrument cavity angle
13.	Position the upper arms parallel to the torso, and place the hands in contact with the thighs. (S24.4.3.2(c))
14.	Move the seat forward while maintaining the thorax instrument cavity angle until any part of the dummy contacts the instrument panel. (S24.4.3.3) No contact. Proceed to step 15 Contact. Proceed to step 16

15.	Move the dummy forward on the seat, maintaining the thorax instrument cavity and thigh angles, and dummy height until any part of the dummy contacts the instrument panel. (S24.4.3.4)					
16.	Verify contact between the instrument panel and the head or torso. If necessary, rotate the torso forward until the head or torso contacts the instrument panel. Achieve this position by maintaining the thighs at there present angle and apply a forward force to the					
			e shoulder joints. (S24.4			
17.	Support the dummy so that there is minimum interference with the full rotational and translational freedom for the upper torso of the dummy. The material should support					
					h the airbag (S24.4.3.6)	
		Pnoto	graph final setup and red			
			Thorax Cavity An Thigh Angle		degrees degrees	
18.	Record the	Airba	g deployment and timing	requiremen		
	Number of	stages	for this test.			
S	tage No.	Firing	Time (msec) *	Recorded	Firing Time (msec)	
	1	0.0 m			Ţ,	
			easured from Time Zero			
19.		ımmy ı	instrumentation to the te	st data acqu	isition system and verify channe	el
20	operation.	a airba	a to the sighest figure over		manufactures's instructions	
20.	provided by			stem per the	manufacturer's instructions,	
21.			speed video/film camera	ie		
21. 22.					a from the dummy instrumentat	ion
23.			ost-test results.	oora tric aat	a nom the duming motiumental	011.
<u>24</u> .			ring times match specifie	ed firing time	s +/- 2 milliseconds.	
<u></u> 25.			ues for this test.	J		
	•					
			FMVSS 208 Maximum	I	Measured Value*	
			Allowable Injury Asse	essment	Dummy Serial No	
			Value			
HIC ₁			700			
	st Acceleration		60 g			
	st Displaceme	ent	40 mm			
	Nij (Nte)		1.0			
	e (ms)		NA 1.0			
	(Nij (Ntf)		1.0			
	e (ms)		NA 1.0			
	(Nij (Nce)		1.0			
	e (ms)		NA 1.0			
	Nij (Ncf) (ms)		1.0 NA			
	K Tension (Fz	- \				
	Compression		1490 N 1820 N			
(Fz)	Compressio	111	1020 11			
	lated on data	recor	ded for 100 ms after the	initial deploy	yment of the air bag. (S4.11(b))	
Calcal	acca on aata		aca for 100 mo antor the	a. dopio	,	
I certify	that I have r	read a	nd performed each instr	uction.	Date	

DATA SHEET 27

Low Risk Deployment Tests Using an Unbelted 5th Percentile Female Dummy (Part 572, Subpart O) (S26)
Position 1 - Chin On Module (S26.2)

NHISA	A No Test Date:
Labora	tory: Test Technician(s):
Dumm	y Serial No
1.	Position the steering wheel so the front wheels are in the straight-ahead position. (S26.2.1)
2.	Position any adjustable parts of the steering controls to the mid-position. If a mid-position adjustment is not achievable, position the controls to the next lowest detent position. (S26.2.1)
3.	Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S26.2.3) N/A – No lumbar adjustment
4.	Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S26.2.3) N/A – No additional support adjustment
5.	If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S26.2.3) N/A – No independent fore-aft seat cushion adjustment
6.	Use the seat markings determined during the completion of Data Sheet 14 to set the seat in the rearmost fore-aft position, mid-height position and the seat cushion angle. (S26.2.3)
7.	The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S26.2.3 and S8.1.3) N/A – No seat back angle adjustment Manufacturer's design seat back angle
8.	Tested seat back angle If adjustable, set the head restraint at the full down and full forward position. (S26.2.3) Any adjustment of the head restraint shall be used to position it full forward. For example, if it rotates, rotate it such that the head restraint extends as far forward as possible. N/A – No head restraint adjustment
9.	Position a calibrated Part 572 Subpart O 5 th percentile female dummy in the driver's seat (S26.2.4)
10.	Position the dummy such that its midsagittal plane is coincident with Plane E (determined during the completion of Data Sheet 14). (\$26.2.4.1)
11.	
12.	Position the dummy's thorax instrument cavity rear face 6 degrees forward (toward the front of the vehicle) of the steering wheel angle (i.e., if the steering wheel angle is 25 degrees from vertical, the thorax instrument cavity rear face angle is 31 degrees.) (S26.2.4.3.)
13.	Set the initial transverse distance between the longitudinal centerlines at the front of the dummy's knees at 160 to 170 mm (6.3 to 6.7 in), with the thighs and legs of the dummy in vertical planes. (S26.2.4.4)
14.	Position the upper arms parallel to the torso, and place the hands in contact with the thighs. (S26.2.4.5)
15.	Move the dummy forward on the seat, maintaining the thorax instrument cavity angle, until the dummy head/torso contacts the steering wheel. (S26.2.5) Adjust the dummy legs

		the minimur	m amou	nt ne	ecessary to ensure	e torso/head	contact with the steering whee	I		
16.		when the dummy is moved forward. (S26.2.4.2)								
			djustmer			the bettem e	f the chin coincides with Dlane	_		
							of the chin coincides with Plane			
			(the highest point of the air bag module cover as determined during the completion of Data Sheet 14). Adjust the fore/aft position of the dummy to maintain contact with the							
		steering wheel. If the seat prevents placing the Chin Point coincident with Plane F, adju								
		the dummy	the dummy position to achieve the closest placement possible. The thorax cavity angle							
			should be maintained throughout the adjustment process. (S26.2.6)							
			Chin Point Lies within Plane F. Height of Chin Pointmm							
	17.				ed with positioning		ht of Chin Point. 11 N (70 lb) and spacer blocks	mm		
_	. ' ' .						nce with the full rotational and	•		
							y. The material should support	the		
							h the airbag (S26.2.7)			
		I	Photogra	aph	final setup and re					
					Thorax Cavity Ar		degrees			
	18.	Record the	Airhag d	denla	Chin Point Heigh		mm ts in the chart below.			
_	.10.	Number of				requiremen	is in the chart below.			
	S	tage No.			e (msec) *	Recorded	Firing Time (msec)			
		1	0.0 ms	ес	(Time Zero)		• • • •			
		* Fining at time			- J (Time 7	f II - t				
	19.				ed from Time Zero		es isition system and verify chann	ol.		
	19.	operation.	illilly ills	suui	nentation to the te	si uala acqu	isition system and verify chann	CI		
	20.	•	e airbag	to th	ne airbag firing sys	stem per the	manufacturer's instructions,			
	•	provided by								
	21.				l video/film camera					
	22.					cord the data	a from the dummy instrumentat	tion.		
	23.	Photograph					/ . O			
	24. 25.	Record inju				ea tiring time	s +/- 2 milliseconds.			
	.25.	Record Injur			SS 208 Maximum	1	Measured Value*			
				Allowable Injury Assessment			Dummy Serial No.			
				/alu	• •	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Banning Containte:			
Г	HIC ₁	5			700					
	Chest Acceleration			60 g						
_	Chest Displacement			52 mm						
_	Peak Nij (Nte)			1.0						
_	Time (ms)				NA 1.0					
_	Peak Nij (Ntf)			1.0						
		e (ms)			NA 1.0					
	Peak Nij (Nce)			1.0						

NA

1.0

NA

2070 N

2520 N

Time (ms)

Time (ms)

Peak Nij (Ncf)

Neck Tension (Fz)

Neck Compression

^{*}Calculated on data recorded for 125 ms after the initiation of the final stage of air bag deployment designed to deploy in any full frontal rigid barrier crash up to 26 km/h. (S4.11(d))

TP208-12	150
Date	_

DATA SHEET 28

Low Risk Deployment Tests Using an Unbelted 5th Percentile Female Dummy (Part 572, Subpart O) (S26)
Position 2 - Chin On Rim (S26.3)

NHISA	A No Test Date:
Labora	tory: Test Technician(s):
Dumm	y Serial No
1.	Position the steering wheel so the front wheels are in the straight-ahead position. (S26.3.2)
2.	Position any adjustable parts of the steering controls to the mid-position. If a mid-position adjustment is not achievable, position the controls to the next lowest detent position. (S26.3.2)
3.	Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S26.3.1) N/A – No lumbar adjustment
4.	Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S26.3.1) N/A – No additional support adjustment
5.	If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S26.3.1) N/A – No independent fore-aft seat cushion adjustment
6.	Use the seat markings determined during the completion of Data Sheet 14 to set the seat in the rearmost fore-aft position, mid-height position and the seat cushion angle. (S26.3.1)
7.	The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S26.3.1 and S8.1.3) N/A – No seat back angle adjustment Manufacturer's design seat back angle
	Tested seat back angle
8.	If adjustable, set the head restraint at the full down and full forward position. (S26.3.1) Any adjustment of the head restraint shall be used to position it full forward. For example, if it rotates, rotate it such that the head restraint extends as far forward as possible. N/A – No head restraint adjustment
9.	Position a calibrated Part 572 Subpart O 5 th percentile female dummy in the driver's seat (\$26.3.4)
10.	Position the dummy such that its midsagittal plane is coincident with Plane E (determined
11.	during the completion of Data Sheet 14). (S26.3.4.1) Position the dummy's legs to a vertical orientation and place the back of the legs in contact with the seat cushion. (S26.3.4.2)
12.	Position the dummy's thorax instrument cavity rear face 6 degrees forward (toward the front of the vehicle) of the steering wheel angle (i.e., if the steering wheel angle is 25 degrees from vertical, the thorax instrument cavity rear face angle is 31 degrees.) (S26.3.4.3.)
13.	Set the initial transverse distance between the longitudinal centerlines at the front of the dummy's knees at 160 to 170 mm (6.3 to 6.7 in), with the thighs and legs of the dummy in
14.	vertical planes. (S26.3.4.4) Position the upper arms parallel to the torso, and place the hands in contact with the thighs. (S26.3.4.5)
15.	Move the dummy forward on the seat, maintaining the thorax instrument cavity angle, until the dummy head/torso contacts the steering wheel. (S26.3.5) Adjust the dummy legs

	the minimum amount necessary to ensure torso/head contact with the stewhen the dummy is moved forward. (S26.3.4.2) Leg adjustments needed	eering wheel
16.	Adjust the dummy position vertically until the Chin Point (determined duri	na the
10.	completion of Data Sheet 14) contacts the upper rim of the steering whee	
	fore/aft position of the dummy to maintain contact with the steering wheel	
	completed, proceed to step 19. If the seat prevents placing the Chin Poil	
	upper steering wheel rim proceed to 17. If the dummy contacts the winds	
	interior, proceed to step 18. (S26.3.6)	silicia di appei
	Chin Point contacts upper steering wheel rim.	
	Height of Chin Point. mm	
	Tiolghe of Child Chile.	
	Vehicle interfered with positioning.	
17.	If the steering controls can be adjusted, adjust the steering controls to rai	se the upper
	steering wheel rim the necessary amount to bring the Chin Point coincide	
	upper steering wheel rim. Adjust the rear thorax cavity along with the ste	
	angle per step 12. If contact is still not achieved, position the Chin Point	
	possible to the upper steering wheel rim. Proceed to step 19. (S26.3.7)	
	Steering Wheel Angle	mm
	Thorax Cavity angle	degree
	Chin Point is coincident with the upper steering wheel rim.	•
	Height of Chin Point	mm
	Height of upper rim	mm
	Chin point is not coincident with the upper steering wheel rim.	
	Height of Chin Point	mm
	Height of upper rim	mm
18.	If the steering controls can be adjusted, adjust the steering controls to lov	
	steering wheel rim the necessary amount to bring the Chin Point coincide	
	upper steering wheel rim. Adjust the rear thorax cavity along with the ste	
	angle per step 12. If contact is still not achieved, position the Chin Point	
	possible to the upper steering wheel rim. If contact with upper interior or v	
	cannot be avoided, lower the dummy to allow a maximum of 5 mm (0.2 in	
	the dummy and the windshield or upper interior. Proceed to step 19. (S26	3.3.6 and
	S26.3.7)	
	Steering Wheel Angle	mm
	Thorax Cavity angle	degree
	Chin Point is coincident with the upper steering wheel rim.	mm
	Height of Chin Point	mm
	Height of upper rim Chin point is not coincident with the upper steering wheel rim.	mm
		mm
	Height of Chin Point	mm
19.	Height of upper rim Using material with a maximum breaking strength of 311 N (70 lb) and sp	mm
19.	Support the dummy so that there is minimum interference with the full rot	
	translational freedom for the upper torso of the dummy. The material sho	
	torso rather than the head and should not interfere with the airbag (S26.3	
	Photograph final setup and record position.	5.0)
	Thorax Cavity Angle	degrees
	Chin Point Height	degrees mm
	Office Office Country	

_20. Record the Airbag deployment and timing requirements in the chart below. Number of stages for this test.

Stage No.	Firing Time (msec) *	Recorded Firing Time (msec)
1	0.0 msec (Time Zero)	

- * Firing time is measured from Time Zero for all stages
- __21. Connect dummy instrumentation to the test data acquisition system and verify channel operation.
- __22. Connect the airbag to the airbag firing system per the manufacturer's instructions, provided by the COTR.
- __23. Prepare the high-speed video/film cameras.
- 24. Fire the airbag per the table above and record the data from the dummy instrumentation.
- 25. Photograph the post-test results
- 26. Verify recorded firing times match specified firing times +/- 2 milliseconds.
- 27. Record injury values for this test.

	FMVSS 208 Maximum Allowable Injury Assessment Value	Measured Value Dummy Serial No.
HIC ₁₅	700	
Chest Acceleration	60 g	
Chest Displacement	52 mm	
Peak Nij (Nte)	1.0	
Time (ms)	NA	
Peak Nij (Ntf)	1.0	
Time (ms)	NA	
Peak Nij (Nce)	1.0	
Time (ms)	NA	
Peak Nij (Ncf)	1.0	
Time (ms)	NA	
Neck Tension (Fz)	2070 N	
Neck Compression (Fz)	2520 N	

I certify that I have read and performed each instruction.	Date	

DATA SHEET 29

Test of Reactivation of the Passenger Air Bag System with an Unbelted 5th Percentile Female Dummy (S20.3, 22.3, S24.3)

Test Date:

NHISA	No lest Date:
Laborat	pry: Test Technician(s):
Seat Po	sition: Rearmost Mid-position Foremost (S20.3.1, 22.3.1, S24.3.1)
1. — — — — — — — — — — — — — — — — — — —	This reactivation test is being performed after the following suppression test: Suppression Test Using 12-Month-Old CRABI Dummy (S20) After section of data sheet 15 Suppression Test Using Newborn Infant Dummy (S20) After section of data sheet 16 Suppression Test Using 3-Year-Old Dummy and Booster Seats (S22) After section of data sheet 17 Suppression Test Using 3-Year-Old Dummy and Forward Facing Convertible Child Restraints (S22) After section of data sheet 18 Suppression Test Using an Unbelted 3-Year-Old Dummy (S22) After section of data sheet 19 Suppression Test Using 6 Year-Old-Dummy and Booster Seats (S24.2.1) After section of data sheet 20 Suppression Test Using 6 Year-Old-Dummy (S24.2.1)
2.	After section of data sheet 21 Leave the seat in the fore-aft position, seat height, and seat cushion angle used for the suppression test. Fully recline the seat back. (S16.3.3.1.2)
5. 6.	N/A seat back not adjustable. Place the dummy in the seat with the legs at an angle of 120 degrees to the thighs. The calves should not be touching the seat cushion. (S16.3.3.1.2) Position the dummy midsagittal plane vertical and coincident with the seating position centerline determined in Data Sheet 14. (S16.3.3.1.3 or S16.3.3.1.4) Hold down the dummy's thighs and push rearward on the upper torso to maximize the pelvic angle. (S16.3.3.1.5)
8.	Set the angle between the legs and the thighs to 120 degrees. (S16.3.3.1.6) Set the transverse distance between the centers of the front of the knees at 160 to 170 mm (6.3 to 6.7 inches). Center the knee separation with respect to the seat centerline. (S16.3.3.1.6)
<u> </u> 9.	Record Knee Separation mm Push rearward on the dummy's knees until the pelvis contacts the seat back, or the backs of the calves contact the seat cushion, whichever occurs first. (S16.3.3.1.6) Pelvis contacted seat back. Calves contacted seat cushion.
	Gently rock the upper torso +/- 5 degrees (approximately 51 mm (2 inches)) side to side three times to reduce the friction between the dummy and the seat. (S16.3.3.1.7)
11.	If the dummy contacts the interior move the seat rearward until a maximum clearance of 5 mm (0.2 inches) is achieved or the seat is in the closest detent position that does not cause dummy contact. (S16.3.3.1.8) If needed, extended the legs until the feet do not contact the floor pan. The thighs should be resting on the seat cushion. (S16.3.3.1.8) N/A No contactDummy contact. Clearance set at maximum of 5mm
	Measured Clearance mmDummy Contact. Seat set at nearest detent position. Seat position detent positions rearward of full forward

12. 13.	(full forward is position zero) Verify the pelvis is not interfering with the seat bight. (S16.3.3.1.9) Verify the dummy abdomen is properly installed. (S16.3.3.1.9)					
—13. 14.	If the seat back is adjustable, rotate the seat back forward while holding the thighs in					
—'	place. Continue rotating the seat back forward until the transverse instrument platform of					
	the dummy head is level +/- 0.5 degrees. If the head cannot be leveled using the seat					
	back adjustment, or the seat back is not adjustable, use the lower neck bracket					
	adjustment to level the head. If a level position cannot be achieved, minimize the angle.					
	(S16.3.3.1.9 and S16.3.3.1.10) (Check All That Apply)					
	Seat back not adjustable					
	Seat back not independent of driver side seat back					
	Head Level Achieved. (Check all that apply)					
	Head leveled using the adjustable seat back					
	Head leveled using the neck bracket.					
	Head Angle degrees					
	Head Level NOT Achieved. (Check all that apply)					
	Head leveled using the adjustable seat back					
	Head leveled using the neck bracket.					
15.	Head Angle degrees Measure and set the pelvic angle using the pelvic angle gage TE-2504. The pelvic angle					
13.	should be 20.0 degrees +/- 2.5 degrees. If the pelvic angle cannot be set to 20 degrees,					
	minimize the angular difference. (S16.3.3.1.11)					
	Pelvic angle set to 20.0 degrees +/- 2.5 degrees.					
	Pelvic angle of 20.0 degrees not achieved, the angular difference was minimized.					
	Record the pelvic angle degrees					
16.	Verify the transverse instrument platform of the dummy head is level +/- 0.5 degrees.					
	Use the lower neck bracket adjustment to level the head. If a level position cannot be					
	achieved, minimize the angle. (S16.3.3.1.9, S16.3.3.1.10, and S16.3.3.1.11)					
	Head Level Achieved					
	Head Angle degrees					
	Head Level NOT Achieved. Head Angle degrees					
17.	Check the dummy for contact with interior after completing adjustments. (S16.3.3.1.12)					
—	No contact.					
	Dummy in contact with interior.					
	Seat moved Aft mm from the previous position.					
	Seat moved Aft detent positions from the previous position.					
18.	Foot positioning. (Indicate final position achieved) (S16.3.3.2)					
	18.1 Place feet flat on the toe board. OR					
	18.2 If the feet cannot be placed flat on the toe board, set the feet perpendicular to the					
	lower leg, and rest the heel as far forward on the floor pan as possible. OR					
	18.3 If the heels do not touch the floor pan, set the legs to vertical and set the feet					
10	parallel to the floor pan					
19.	Passenger arm/hand positioning. (S16.3.3.3) 19.1 Place the dummy's upper arms adjacent to the torso with the arm centerlines as					
	close to a vertical longitudinal plane as possible. (S16.3.2.3.1)					
	19.2 Place the palms of the dummy in contact with the outer part of the thighs					
	(\$16.3.3.3.2)					
	19.3 Place the little fingers in contact with the seat cushion. (S16.3.3.3.3)					
20.	Adjustable head restraints					
	20.1 If the head restraint has an automatic adjustment, leave it where the system					
	positions the restraint after the dummy is placed in the seat. (S16.3.4.1)					
	N/A Vehicle does not contain automatic head restraints.					
	20.2 Adjust the head restraint to its lowest position. (S16.3.4.2)					
	20.3 Measure the vertical distance from the top most point of the head restraint to the					
	bottom most point. Locate a horizontal plane through the midpoint of this					

	distance. Adjust the head restraint vertically so that this horizontal plane is	
	aligned with the center of gravity (CG) of the dummy head. (S16.3.4.3)	
	Vertical height of head restraint mm	
	Mid-point height mm _20.4 If the above position is not attainable, move the vertical center of the head restraint to the closest detent below the center of the head CG. (S16.3.4.3) N/A midpoint position attained in previous step Head rest set at nearest detent below the head CG _20.5 If the head restraint has a fore and aft adjustment, place the restraint in the foremost position or until contact with the head is made, whichever occurs firs:	t.
	(S16.3.4.4)	
21.	Start the vehicle engine or place the ignition in the "on" position, whichever will turn on the suppression system, and close all vehicle doors. (S22.2.1.7) Wait 10 seconds, and then check whether the air bag is suppressed. (S22.2.1.8) Air Bag Suppressed – FAIL	
	_Ali Bag Supplessed – FAIL Air Bag Not Suppressed – Pass	
22.	_All bag Not Supplessed – Pass Return the ignition switch to the "off" position.	
I certify	nat I have read and performed each instruction.	

DATA SHEET 30

VEHICLE WEIGHT, FUEL TANK, AND ATTITUDE DATA

Laboratory:							
		Test Technician(s):					
Impact	Angle:	Belted D	Belted Dummies:YesNo				
Test S	peed:32 to 40 km	ph _	0 to 48 kmph0 to 56 l				
Driver	Dummy: 5 th female _	50 th male	Passenger Dummy	: 5 th femal	le 50 th male		
1234567891011.	Fill the transmission w Drain fuel from vehicle Run the engine until fu stops. Record the useable fuel Record the fuel tank ca Using purple dyed Storn 1 solvent or cleaning fl for Hydrocarbon Dry-ca Amount added Fill the coolant system Fill the engine with mo Fill the brake reservoir Fill the windshield was Inflate the tires to the t inflate t	el remaining in the el tank capacity supplied in dard solvent havir uid, Table 1, ASTM leaning Solvents," to capacity. tor oil to the max. r with brake fluid to her reservoir to capire pressure on the ecommended pres RF; ure :RF; ight at each wheel ed" weight).	fuel delivery system oplied by the COTF the owner's manual grand the physical and the Standard D484-7 or gasoline, fill the formal level. Doacity. tire placard. If no sure in the owner's sure in the owner's sure in the owner's the company of the	m is used ar R. al. chemical pr 1, "Standard fuel tank. k. tire placard is manual. manual. manual. manual.	roperties of Type Specifications is available, LR LR LR icle weight		
	Right Front =	kg	Right Rear	=	kg		
	Left Front =	kg	Left Rear =	=	kg		
	TOTAL FRONT =	kg	TOTAL RE	AR =	kg		
	% Total Weight =	%	% Total We	eight =	%		
	UVW = TOTAL FRON	T PLUS TOTAL RE	EAR = kg	3			
13.		n the vehicle above cle on a level surfa endicular to the leve measurements	e the center of each ce. el surface to the 4	points marke	ed on the body		
	K⊢ .	1 - '	RR · IR				

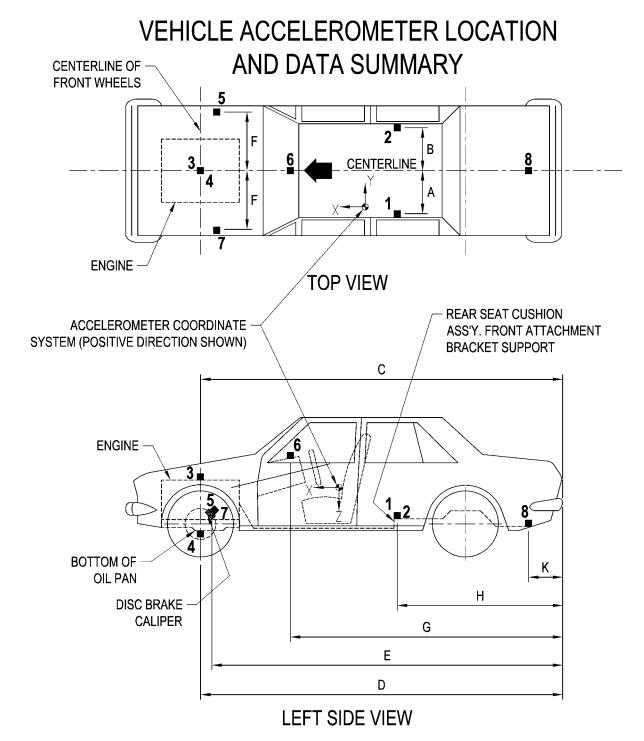
 Calculate the Rated Cargo and Luggage Weight (RCLW). 14.1 Does the vehicle have the vehicle capacity weight (VCW) on the certification Yes, go to 14.3. 							ion label or tire pla	acard?	
	14.2	No, go to 14.2. 14.2 VCW = Gross Vehicle Weight – UVW VCW = =							
		VCW =			ntain the Desig	inated Sea	ting Capa	acity (DSC)?	
	14.4 Does the certification or tire placard contain the Designated Seating Capacity (DSC)?Yes, go to 14.6. No, go to 14.5 and skip 14.6.								
		DSC = Total nu DSC =	ımber of seat l	oelt assem	blies =				
	14.7	RCLW = VCW	— (68 kg x DS	C) =	(68 k	g x)) =		
	14.8	Is the vehicle c Yes. If the c	ertified as a tru	uck, MPV W is great	or bus (see the er than 136 kg	e certificati	on label c	on the door jamb)? RCLW. (S8.1.1)	•
15.		oaded Weight (1	00% fuel fill)						
	15.1	Place the appro Driver: Passenger:	5 th female	50 th	male	ard seating	positions	3.	
	15.2	Load the vehicl				ichever is	applicable	Э.	
	15.3	Place the RCL\ (S8.1.1 (d))	W in the cargo	area. Ce	nter the load o	ver the lon	gitudinal	centerline of the v	ehicle.
	15.4	Record the veh	icle weight at	each whee	el to determine	the Fully I	Loaded W	Veight.	
		Right Front =		kg	Right Rear =			_ kg	
		Left Front =		kg	Left Rear =			_ kg	
		TOTAL FRONT	Γ=	kg	TOTAL REA	R =		_ kg	
		% Total Weight	t =	%	% Total Weig	ght =		_ %	
		% GVW	=	%	% GVW	=	-	_ %	
16.	16.1	FULLY LOADE coaded Test Vehice Place the vehice Measure perpet and record the	cle Attitude: (a tle on a level sendicular to the	all dimens urface. level surf	ons in millimet	ters		lbs body (see 13.1 ab	oove)
17.	Drain t	RF; he fuel system	LF;	RR	; LR				
<u></u> 18.	Using p	ourple dyed Stod						of Type 1 solvent	
	cleaning fluid, Table 1, ASTM Standard D484-71, "Standard Specifications for Hydrocarbon Dry-cleaning Solvents," fill the fuel tank to 94 percent of useable capacity.								
	Fuel tank capacity x .94 = x .94 =								
19.	Amount addedCrank the engine to fill the fuel delivery system with Stoddard solvent.								
20.	Calcula	ate the test weigh	nt range.						
		Calculated Wei							
	20.2	Test Weight Ra	ange = Calcula	ted Weigh	it (- 4.5 kg, - 9	kg.)			
		Max. Test Weig	ght = Calculate	ed Test We	eight – 4.5 kg =	=			
21.	Remov	Min. Test Weig re the RCLW fror			ıуп. – 9 кg =				
22.	Drain t		l, engine coola	nt, motor			er fluid fro	om the test vehicle	so

20.	Vehicle Components Removed For Weight	l Reduction:
24.		ad carrying area and distribute it, as nearly as possible, to ed by the gross axle weight ratings and center it over the
25.	If necessary, add ballast to achieve the actuN/A	tual test weight.
26. 27.	interfere with data collection or interfere with the vehicle or do anything else to affect test hardware added to the vehicle is not in the	
	Right Front = kg	g Right Rear =kg
	Left Front =kg	g Left Rear =kg
	TOTAL FRONT = kg	g TOTAL REAR = kg
	% Total Weight = %	% Total Weight =%
	% GVW = % (%GVW = Axle GVW ÷ Vehicle GVV TOTAL FRONT PLUS TOT	/W)
28.		t and the Min. Weight (See 20.2)?
29.	and record the measurements	e. I surface to the 4 points marked on the body (see 13 above)
30.		F; RR; LR
	30.1 AS DELIVERED: RF; LF_	F; RR; LR
	AS TESTED: RF; RF	F; RR; LR
	FULLY LOADED: RF: LF30.2 Is the "as tested" test attitude equal	F; RR; LR al to or between the "fully loaded" and "as delivered" attitude

DATA SHEET 31

Vehicle Accelerometer Location

NHTSA	No	Test D	Date:
Laboratory:		Test Technician(s):	
Impact Angle:		Belted Dummies:YesNo	
Test Sp	eed:32 to 40 kmph	0 to 48 kmph	0 to 56 kmph
Driver D	Dummy: 5 th female 50 th r	male Passenger Dummy:5 th	female 50 th male
2.	the center of the left front outb accelerometer at this intersect Record the location on the foll Find the location where the ve the center of the right front out	oard seating position intersects the cion on the rear seat cross member owing chart. In the critical plane parallel to the longitude the country of the cou	dinal centerline of the vehicle and through ne left rear seat cross member. Install an er to record x-direction accelerations. dinal centerline of the vehicle and through the right rear seat cross member. Install
3.	Record the location on the foll- Find the location where a verti- transverse plane through the of of the engine. Install an accel	owing chart. ical plane through the longitudinal center of the two wheels on oppose erometer at this intersection to re	mber to record x-direction accelerations. I centerline of the vehicle and a vertical site sides of the engine intersect at the top cord x-direction accelerations. Record the
4.	transverse plane through the o	ical plane through the longitudinal center of the two wheels on oppos in accelerometer at this intersection	I centerline of the vehicle and a vertical site sides of the engine intersect the on to record x-direction accelerations.
5.	Install an accelerometer on the	e right front brake caliper to recor	d x-direction accelerations. Record the
6.		ical plane through the longitudinal Il an accelerometer at this interse	I centerline of the vehicle intersects the top ction to record x-direction accelerations.
7.	Install an accelerometer on the	e left front brake caliper to record	x-direction accelerations. Record the
8.		ical plane through the longitudinal celerometer on the trunk floor at	I centerline of the vehicle intersects the this intersection to record z-direction
I certify	that I have read and performed	d each instruction.	Date



DIMENSION CORRESPONDING TO THE LETTERS "A" THROUGH "K" ARE RECORDED IN THE TABLE ON THE FOLLOWING PAGE.
ACCELEROMETERS CORRESPONDING TO THE NUMBERS 1 THROUGH 8 ARE SPECIFIED ON THE PRECEDING PAGE.

DATA SHEET 31 VEHICLE ACCELEROMETER LOCATION MEASUREMENTS

DIMENSION	LENGTH (inches)						
PRETEST VALUES							
<u>A</u>							
<u>B</u>							
<u>C</u>							
<u>D</u>							
<u>E</u>	Right Side	Left Side					
<u>E</u>	Right Side	Left Side					
<u>G</u>	Right Side	Left Side					
<u>H</u>							
<u>K</u>							
	POST TEST VALUES						
<u>A</u>							
<u>B</u>							
<u>C</u>							
<u>D</u>							
<u>E</u>	Right Side	Left Side					
<u>E</u>	Right Side	Left Side					
<u>G</u>	Right Side	Left Side					
<u>H</u>							
<u>K</u>							

REMARKS:

DATA SHEET 32

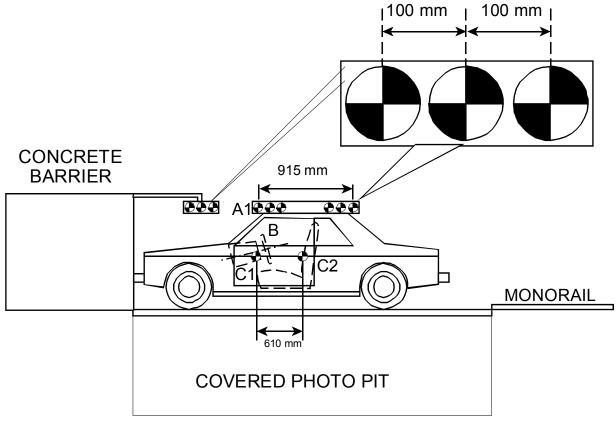
Photographic Targets

NHTSA	A No	_	Test Da	ite:	
Laborat	tory:	Test Technician(s):			
Impact	Angle: Offset p	ercentage:	Belted [Oummies:Yes	sNo
Test Sp	peed:32 to 40 kmph	0 to 48 kmph	ı	0 to 56 kmph	1
Driver D	Dummy: 5 th female 50 th ma	le Passenger Dur	nmy: 5	th female 50	th male
1.1	Three circular targets at least 90 front on the outboard sides of A1	ctangular panels. mm in diameter and wi and A2. The center of	ith black a	and yellow quad	
1.3	to it. Distance between target Three circular targets at least 90 back on the outboard sides of on	mm in diameter and wind A1 and A2. The center	er of each		
1.4	The distance between the first ci back of A1 and A2 is at least 915	5 mm.	t of A1 an		st circular target at the
1.5	Distance between the first and la Firmly fix target A1 on the vehicle midsagittal plane of the driver du	e roof in the vertical lon	gitudinal	mm plane that is coi	ncident with the
1.6	Firmly fix target A2 on the vehicle midsagittal plane of the passeng	e roof in the vertical lon	gitudinal	plane that is coi	ncident with the
1.7	Two circular targets (C1 and C2) mounted on the outside of the dr	at least 90 mm in diam iver door. The centers			
	Two circular targets (C1 and C2) mounted on the outside of the pa apart. Distance between	at least 90 mm in diam assenger door. The cer en targets	_ neter and nters of ea _mm	ach circular targ	et are at least 610 mm
1.10	Place tape with squares having a Chalk the bottom portion of the s Is this an offset test? Yes, continue with this section	teering wheel.	top porti	on of the steerir	ng wheel.
1.13	No, go to 2. Measure the width of the vehicle Find the centerline of the vehicle Find the line parallel to the cente vehicle.	. Vehicle width (½ of the vehicle width	า)		the centerline of the
1.15	Apply 25 mm wide tape with alte found in 1.14. The edge of each from the bottom of the bumper to	tape shall be 50 mm fr	om the lir	ne found in 1.14	
2. 2.1 2.2 2.3	Barrier targeting Fix two stationary targets D1 and vertical longitudinal plane that is the vertical longitudinal plane that Targets D1 and D2 are on a rect Three circular targets at least 90	coincident with the mid it is coincident with the angular panel. mm in diameter and wi	sagittal p midsagitt ith black a	lane of the drive al plane of the p and yellow quad	er dummy. The other is in passenger dummy frants are mounted on
	the sides of the rectangular pane circular target is 100 mm from th		ılar target	ts on D1	

3. FMVSS 208 dummy targeting requirements

Place a circular target with black and yellow quadrants on both sides of the driver dummy head as close as possible to the center of gravity of the head in the x and z direction (relative to the measuring directions of the accelerometers).
Place a circular target with black and yellow quadrants on both sides of the passenger dummy head as close as possible to the center of gravity of the head in the x and z direction (relative to the measuring directions of the accelerometers).
Place a circular target with black and yellow quadrants on the outboard shoulder of the driver dummy. Place the target as high up on the arm as possible at the intersection of the arm and shoulder. The sleeve of the shirt on the dummy may be cut to make the target visible, but do not remove any material.
Place a circular target with black and yellow quadrants on the outboard shoulder of the passenger dummy. Place the target as high up on the arm as possible at the intersection of the arm and shoulder. The sleeve of the shirt on the dummy may be cut to make the target visible, but do not remove any material.
FMVSS 204 targeting requirements
Is an FMVSS 204 indicant test ordered on the "COTR Vehicle Work Order?" Yes, continue with this form.
No, this form is complete Resection panel (Figure 28C)
4.2.1 The panel deviates no more than 6 mm from perfect flatness when suspended vertically4.2.2 The 8 targets on the panel are circular targets at least 90 mm in diameter and with black and yellow quadrants.
4.2.3 The center of each of the 4 outer targets are placed within 1 mm of the corners of a square measuring 914 mm on each side.
4.2.4 Locate another square with 228 mm sides and with the center of this square coincident with the center of the 914 mm square.
4.2.5 The center of the 4 inner targets are placed at the midpoints of each of the 228 mm sides.
Place a circular target at least 90 mm in diameter and with black and yellow quadrants on a material (cardboard, metal, etc.) that can be taped to the top of the steering column.
Tape the target from 4.3 to the top of the steering column in a manner that does not interfere with the
movement of the steering column in a crash.
that I have read and performed each instruction. Date

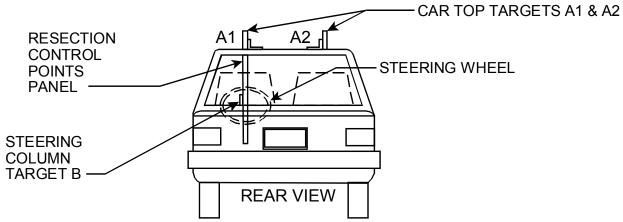
REFERENCE PHOTO TARGETS



LEFT SIDE VIEW

FIGURE 28A

RESECTION PANEL TARGETING ALIGNMENT



TEST RUN STEERING COLUMN CAMERA VIEW OF TYPICAL TIME ZERO VEHICLE POSITION

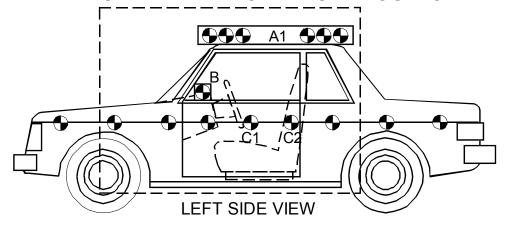
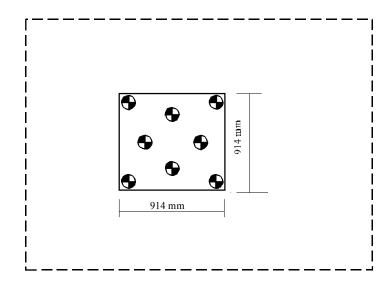


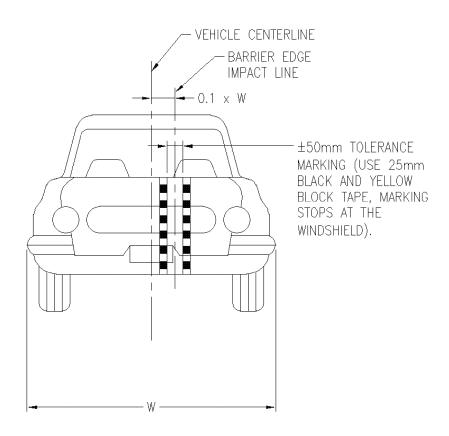
FIGURE 28B

PRE-RUN STEERING COLUMN HIGH SPEED CAMERA VIEW



LEFT SIDE VIEW

FIGURE 28C



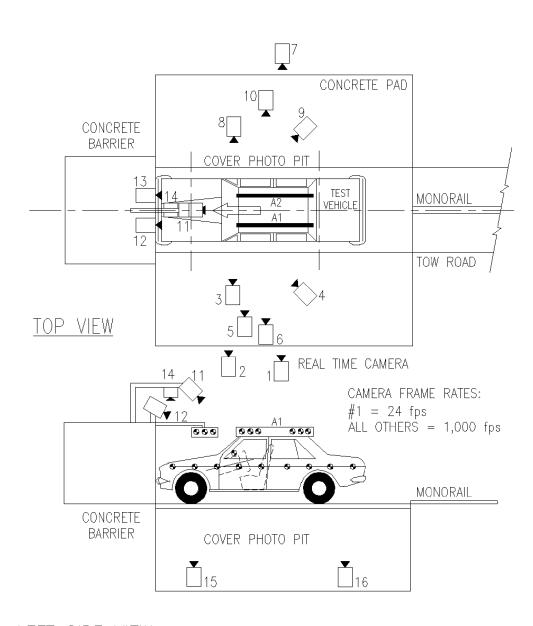
OFFSET DEFORMABLE BARRIER ADDITIONAL VEHICLE TARGETING

DATA SHEET 33CAMERA LOCATIONS

VEH. NHTSA No.:;	TEST DATE:	;	TIME:
VEH_YEAR/MAKE/MODEL/BODY ST	YI F·		

CAMERA NO.	VIEW	CAMERA POSITIONS (mm) *		ANGLE (deg.)	FILM PLANE TO HEAD TARGET	LENS (mm)	SPEED (fps)	
		х	Y	z				
1	Left SideView							24
2	Left Side View (barrier face to front seat backs)							
3	Left SideView (A-post)							
4	Left Side View (B-post aimed toward center of steering wheel)							
5	Left Side View (B-post)							
6	Left Side View (front door under camera 5)							
7	Right Side View (overall)							
8	Right Side View (A-post)							
9	Right Side View (B-post)							
10	Right Side View (front door)							
11	Front View Windshield							
12	Front View Driver							
13	Front View Passenger							
14	Overhead Barrier Impact View							
15	Pit Camera Engine View							
16	Pit Camera Fuel Tank View							

X - film plane to barrier face
Y - film plane to monorail centerline
Z - film plane to ground



LEFT SIDE VIEW

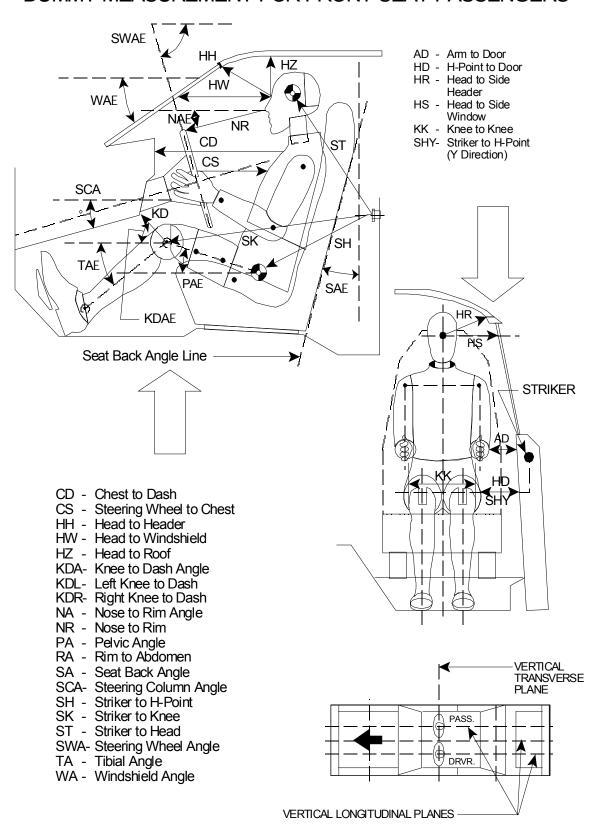
CAMERA POSITIONS FOR FRONTAL IMPACTS

DATA SHEET 34Dummy Positioning (See Appendices F and G)

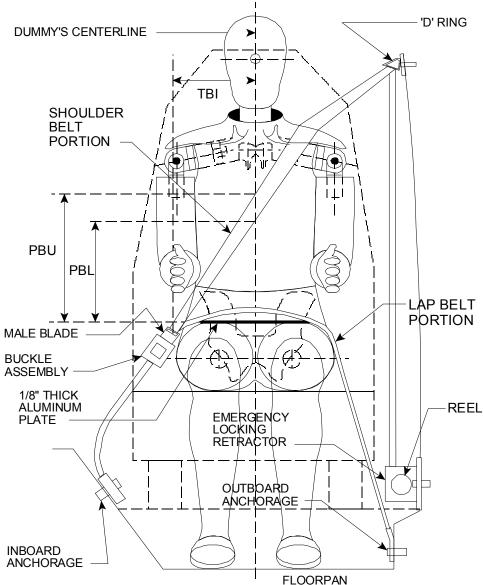
DATA SHEET 35DUMMY POSITIONING MEASUREMENTS

	DRIVER (Serial No)	PASSENGER (Serial No)
WA°		
SWA°		NA
SCA°		NA
SA°		
HZ		
HH		
HW		
HR		
NR	ANGLE	NA
CD		
CS		
RA		
KDL		
KDR		
PA°		
TA°		
KK		
ST	ANGLE	ANGLE
SK	ANGLE	ANGLE
SH	ANGLE	ANGLE
SHY		
HS		
HD		
AD		

DUMMY MEASUREMENT FOR FRONT SEAT PASSENGERS



15. DATA SHEETS....Continued SEAT BELT POSITIONING DATA



FRONT VIEW OF DUMMY

DESCRIPTIONS OF DUMMY MEASUREMENTS

When a level is to be used, it is to ensure that the line containing the two points described is either parallel or perpendicular to the ground. If a measurement to be made is less than 10 inches ignore the directions to use a level and approximate a level measurement. Also, when a measurement is to be taken to or from the center of a bolt on the dummy, take the measurement from the center of the bolt hole if the bolt is recessed.

The following measurements are to be made within a vertical longitudinal plane.

- * HH Head to Header, taken from the point where the dummy's nose meets his forehead (between his eyes) to the furthest point forward on the header.
- * HW Head to Windshield, taken from the point where the dummy's nose meets his forehead (between his eyes) to a point on the windshield. Use a level.
 - HZ Head to Roof, taken from the point where the dummy's nose meets his forehead (between his eyes) to the point on the roof directly above it. Use a level.
- * CS Steering Wheel to Chest, taken from the center of the steering wheel hub to the dummy's chest. Use a level.
- * CD Chest to Dash, place a tape measure on the tip of the dummy's chin and rotate five inches of it downward toward the dummy to the point of contact on the transverse center of the dummy's chest. Measure from this point to the closest point on the dashboard either between the upper part of the steering wheel between the hub and the rim, or measure to the dashboard placing the tape measure above the rim, whichever is a shorter measurement. See photograph.
 - RA Steering Wheel Rim to Abdomen, taken from the bottommost point of the steering wheel rim horizontally rearward to the dummy. Use a level.
 - NR Nose to Rim, taken from the tip of the dummy's nose to the closest point on the top of the steering wheel rim. Also indicate the angle this line makes with respect to the horizontal (NA).
- *1 KDL, KDR Left and Right Knees to Dashboard, taken from the center of the knee pivot bolt's outer surface to the closest point forward acquired by swinging the tape measure in continually larger arcs until it contacts the dashboard. Also reference the angle of this measurement with respect to the horizontal for the outboard knee (KDA). See photograph.
 - SH, SK, ST

 Striker to Hip, Knee, and Head, these measurements are to be taken in the X-Z plane measured from the forward most center point on the striker to the center of the H-point, outer knee bolt, and head target. When taking this measurement a firm device that can be rigidly connected to the striker should be used. Use a level. The angles of these measurements with respect to the

^{*} Measurement used in Data Tape Reference Guide

15. DATA SHEETS....Continued

HS

horizontal should also be recorded. The measurement in the Y (transverse) direction from the striker to the H-point should also be taken (SHY). See photograph.

Head to Side Window, taken from the point where the dummy's nose meets his

bolt head outer surfaces. For Hybrid III dummies measure the distance between the outboard knee clevis flange surfaces. (This measurement may not be exactly

The following measurements are to be made within a vertical transverse plane.

		forehead (between his eyes) to the outside of the side window. In order to make this measurement, roll the window down to the exact height that allows a level measurement. Use a level. See photograph.
*	AD	Arm to Door, taken from the outer surface of the elbow pivot bolt on a Hybrid II dummy to the first point it hits on the door. In the case of a Hybrid III dummy, measure from the bolt on the outer biceps. When a SID is used make the measurement from the center of the bottom of the arm segment where it meets the dummy's torso.
*	HD	H-point to Door, taken from the H-point on the dummy to the closest point on the door. Use a level.
*	HR	Head to Side Header, measure the shortest distance from the point where the dummy's nose meets his forehead (between his eyes) to the side edge of the header just above the window frame, directly adjacent to the dummy.
	SHY	Striker to H-point, taken from a rod rigidly connected to the forward most center point on the striker to the H-point. Use a level. See photograph.
	KK	Knee to Knee, for Hybrid II dummies measure the distance between knee pivot

transverse)

horizontal.

ANGLES

SCA

NA

SA	Seat Back Angle, find this angle using the instructions provided by the manufacturer. If the manufacturer doesn't provide clear instructions contact the COTR.
PA	Pelvic or Femur Angle, taken by inserting the pelvic angle gauge into the H-point gauging hole on the SID or the Hybrid III dummies and taking this angle with respect to the horizontal. Measure the angle of the line connecting the H-point hole and the outer knee pivot bolt hole on a Hybrid II dummy with respect to the horizontal, to find the femur angle.
SWA	Steering Wheel Angle, find this by placing a straight edge against the steering wheel rim along the longitudinal plane. Then measure the acute angle of the straight edge with respect to the horizontal.

Steering Column Angle, measured with respect to the horizontal by placing an

Measure the angle made when taking the measurement NR with respect to the

inclinometer on the center of the underside of the steering column.

^{*} Measurement used in Data Tape Reference Guide

¹ Only outboard measurement is referenced in Data Tape Reference Guide

KDA Knee to Dash Angle, the angle that the measurement KD is taken at with respect to the horizontal. Only get this angle for the outboard knee. See photograph.

WA Windshield Angle, place an inclinometer along the transverse center of the windshield exterior (measurement is made with respect to horizontal).

TA Tibial Angle, use a straight edge to connect the dummy's knee and ankle bolts. Then place an inclinometer on the straight edge and measure the angle with respect to the horizontal.

PHOTOGRAPHS DEPICTING HOW TO TAKE SOME OF THE MEASUREMENTS

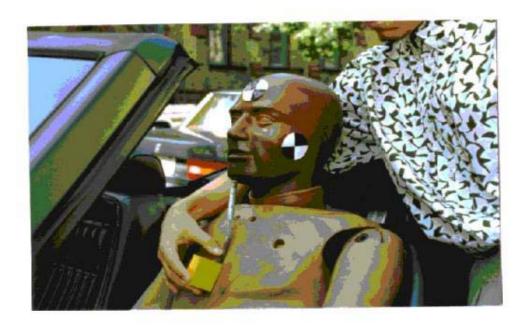
ST-Striker to Head



ST-Striker to Head



CD-Chest to Dash



CD-Chest to Dash



SH-Striker to H-Point



SH-Striker to H-Point



SK-Striker to Knee



SK-Striker to Knee



HS-Head to Side Window



SHY-Striker to H-Point (Y-DIR.)



KDL/KDR-Knee to Dash KDA-Knee to Dash Angle



DATA SHEET 36 CRASH TEST

NHTSA I	No				Т	est Date:			
Laborato	ory:		Te	st Technician(s):				
Impact A	ngle:		Ве	Ited Dummies	:Yes_	_No			
Test Spe	eed: _	_32 to 40 kmp	oh	0 to 48	8 kmph	0 to	o 56 kmph		
Driver Du	ummy:	5 th female _	_ 50 th male	Passenger D	oummy:_	_ 5 th female	50 th male	е	
2.	The speed The speed (spec. is 3 Convertible N/A – N Instrumen Tires inflater, then in kpa from keft fro	d measuring of com (1) let op is in the lot a convertil tation and winted to pressure inflated to the control left tire cond shund control left the ON position placed in rake off the ON position left and latcher condition left whether the door left door left door left contact points in the contact points in the contact points left left left left left left left left	devices are indevices are indevices are placed res are placed res are placed res are placed res are placed kpa spaced kpa spaced kpa spaced required distribution are detected in the calibration indeviced but not look to calibration in the calibration indeviced but not look to calibration in the ca	ed so the motion card or if it do be specified on tire specified o	on of the es not ha he owner placard or placard or placard or placard or placard or not	dummies durve a tire place information. For in owner in or in owner in or in owner in or in owner in and recorde f the test product the test product of the vehicle of the vehicle	ring impact in card because. Information i	is not affect e it is not a	ted.
L cortifu t	hat I have	e read and pe	rformed occ	h instruction		Date			
i ocitiiy t	nati nave	, read and pe	nonneu cac	กา การแนบแบบ.		Date			

DATA SHEET 37 Offset Deformable Barrier Test Using Belted 5th Percentile Female Dummies (Part 572, Subpart O) (S18)

NHTSA No	Test Date:
Laboratory:	Test Technician(s):
Test Number:	Barrier Serial Number:
Driver dummy Serial Nu	umber: Passenger Dummy Serial Number:
Vehicle Speed	40 km/hr Offset Percent
1.0 Pre-Test Activities	;
1.1 Complete the fo	ollowing data sheets
1.1.1 1.1.2 1.1.3 1.1.4 1.1.5 1.1.6 1.1.7 1.1.8	Vehicle Receiving and Inspection Vehicle Weight, Fuel Tank, and Attitude Vehicle Accelerometer Location General Test Vehicle Data Photographic Targets Camera Locations 5 th Percentile Female Dummy Calibration Appendix G 5 th Percentile Female Dummy Seating and Positioning Procedure
1.2 Barrier Certifica	tion
1.2.1	Verify the offset deformable barrier materials and construction are certified to Subpart C of 49 CFR 587. (Attach vendor certification sheets to this data sheet.)
1.3 Verify barrier m	easurements and complete the table below. (See Figure 1)

	Specified Dimension in mm +/- 2.5 unless specified	Measured Dimension in mm
Main Body Height RH Side	650	
Main Body Height LH Side	650	
Floor to Lower Barrier LH	200 +/- 15	
Floor to Lower Barrier RH	200 +/- 15	
Main Body Width	1000	
Bumper Element Width	1000	
Bumper Element Height LH	330	
Bumper Element Height RH	330	
Main Body Depth LH	450	
Main Body Depth RH	450	
Bumper Element Depth LH	90	
Bumper Element Depth RH	90	
Upper Slot Location	220	
Lower Slot Location	110	
Upper Slot Width	4mm Max	
Lower Slot width	4mm Max	

 1.3.1 All Dimensions	within	specified	lolerance
Yes			

__ 1.4 Verify deformable barrier mounted using 10 bolts (8mm diameter minimum) and the steel strips specified.

1.5	Verify h	neight of Fixed Rigid Barrier relative to vehicle being tested.
1.6	Photog	raph pre-test condition. Include photograph shown below.
		Pre-test frontal view of test vehicle
		Pre-test left side view of test vehicle
		Pre-test right side view of test vehicle
		Pre-test left front three-quarter view of test vehicle
		Pre-test right rear three-quarter view of test vehicle
		Pre-test windshield view
	_	Pre-test engine compartment view
	_	Pre-test fuel filler cap view
		Pre-test front underbody view ¹
		Pre-test rear underbody view ¹
		Pre-test driver dummy position with the door open and with the camera perpendicular to the
		longitudinal centerline of the vehicle and in line with the markings showing the fore-aft position of
		the seat.
		Frontal Pre-test driver dummy position with the camera in the same plane as the longitudinal
		centerline of the dummy.
		Pre-test passenger dummy position with the door open and with the camera perpendicular to the
		longitudinal centerline of the vehicle and in line with the markings showing the fore-aft position of
		the seat
		Frontal Pre-test passenger dummy position view with the camera in the same plane as the
		longitudinal centerline of the dummy.
		Dummy contact point(s) (vehicle and dummy)
		Pre-test view of the knee bolsters.
		Pre-test view of the steering column shear capsule if any part of it is visible. Do NOT
		disassemble any parts to take these photographs.
		Pre-test under hood view of the steering column intersecting the fire wall. Take the best
		photograph possible without removing any parts. Pre-test view of the steering column intersecting the firewall from inside the vehicle. Take the
		best photograph possible without removing any parts.
		boot photograph possible without formeving any parte.
2.0	Test Ex	xecution
	2.1	Impact vehicle into offset deformable barrier at a speed of 25 km/hr +0/-2 km/hr
		Record Impact speed Trap 1 km/hr
		Trap 2 km/hr
		Trap Location (from barrier) mm
		Speed at impact 25 km/hr +0 / -2 km/hr Yes / No
	2.2	Strike barrier at offset of 10% of vehicle width +/- 50mm from the vehicle centerline.
		Vehicle Widthmm
		Required Offsetmm
		Actual Measured Offsetmm
		Offset within +/- 50mm Yes / No
	2.3	Vehicle attitude at impact 0.0 degrees +/- 5 degrees
		Impact angledegrees
		Impact angle 0.0 +/- 5 degrees Yes / No
3.0 Pos	st Test A	Activities
0.4	DI 4	and and that are 190 and back of a bath what are a back of a back
3.1	Photog	raph post-test condition. Include photograph shown below.
		Post test frontal view of test vehicle
		Post test left side view of test vehicle
		Post test right side view of test vehicle
		Post test left front three-quarter view of test vehicle
	—	Post test right rear three-quarter view of test vehicle
	—	Post test windshield view
	—	Post test fuel filler can view
	_	Post test fuel filler cap view Post test front underbody view ¹
		I OST TOST TOTAL ATACTOMY VIEW

		Post test rear underbody view ¹
	—	Post test driver dummy position with the door open and with the camera perpendicular to the longitudinal centerline of the vehicle and in line with the markings showing the fore-aft position of the seat.
	_	Frontal post test driver dummy position with the camera in the same plane as the longitudinal centerline of the dummy.
		Post test passenger dummy position with the door open and with the camera perpendicular to the longitudinal centerline of the vehicle and in line with the markings showing the fore-aft position of the seat
	_	Frontal post test passenger dummy position view with the camera in the same plane as the longitudinal centerline of the dummy.
		Dummy contact point(s)(vehicle and dummy)
		Post test view of the knee bolsters.
	_	Post test view of the steering column shear capsule if any part of it is visible. Do NOT disassemble any parts to take these photographs.
	—	Post test under hood view of the steering column intersecting the fire wall. Take the best photograph possible without removing any parts.
	_	Post test view of the steering column intersecting the fire wall from inside the vehicle. Take the best photograph possible without removing any parts.
		Post test Stoddard solvent spillage location view, if required.
		Post test electrolyte spillage location view, if required.
		Post test top view of test vehicle while vehicle is on static rollover machine. (If applicable)
3.2	Proces	s data channels per section 11.14 and record injury values in the Table.

	FMVSS 208 Maximum Allowable Injury Assessment Value	Measured Value Driver Dummy Serial No.	Measured Value Passenger Dummy Serial No.
HIC ₁₅	700		-
Chest Acceleration	60 g		
Chest	52 mm		
Displacement			
Peak Nij (Nte)	1.0		
Time (ms)	NA		
Peak Nij (Ntf)	1.0		
Time (ms)	NA		
Peak Nij (Nce)	1.0		
Time (ms)	NA		
Peak Nij (Ncf)	1.0		
Time (ms)	NA		
Neck Tension (Fz)	2620 N		
Neck Compression (Fz)	2520 N		

All injury Criteria within limits
Pass
Fail

__3.3 Perform post-test calibration check.

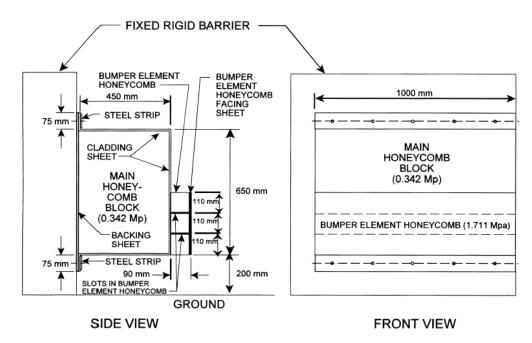


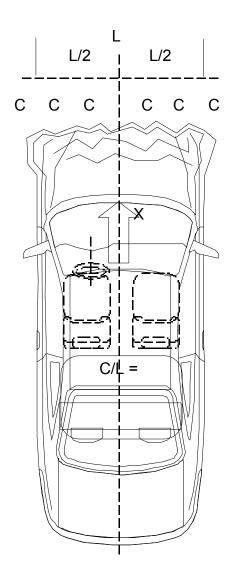
FIGURE 1 OFFSET BARRIER

I certify that I have read and performed each instruction.	Date	

DATA SHEET 38 ACCIDENT INVESTIGATION MEASUREMENTS

NHTSA No Test Date:					
_aboratory: Test Technician(s):	_				
mpact Angle: Belted Dummies:YesNo					
Test Speed:32 to 40 kmph					
Driver Dummy: 5 th female 50 th male Passenger Dummy: 5 th female 50 th male					
/ehicle Year/Make/Model/Body Style:					
/IN:					
Wheelbase:; Build Date:;					
Veh. Size Category:; Test Weight:					
Front Overhang:; Overall Width:					
Accelerometer Data:					
Location:	_				
Linearity:; Integration Algorithm:					
Veh. Impact Speed:; Time of Separation:; Vel. Change:	-				
Collision Deformation Classification (CDC) Code:					

Impact Mode:	
Crush Depth Dimens	sions:
C1 =i	inches
C2 =i	inches
C3 =i	inches
C4 =i	inches
C5 =i	inches
C6 =i	inches
Midpoint of Damage (Vehicle Longitudina	
Length of Damage F	Region:
L =	_inches
REMARKS:	



DATA SHEET 39 WINDSHIELD MOUNTING (FMVSS 212)

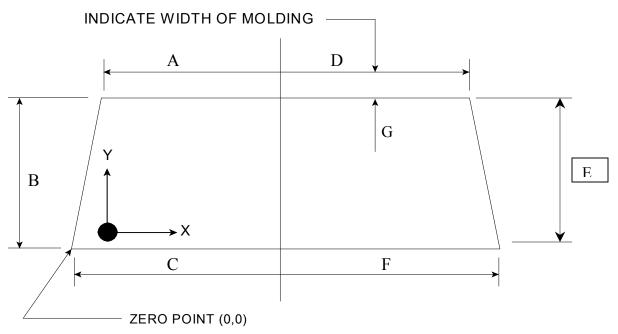
NHTS	A No		Test Da	ite:	
Labora	tory:	Test Technician(s):	:		_
Impact	Angle:	Belted Dummies: _	_YesNo		
Test Sp	peed:32 to 40 kmph	0 to 48 k	cmph _	0 to 56 kmph	
Driver I	Dummy: 5 th female 50 th	^h male Passenger Dur	mmy: 5 th fer	male 50 th male	
the boo edge is location	ehicle windshields are either by by a rubber retainer. It is on hidden from view. The test hs. After the impact test the co ield periphery. Do not disturb	lifficult to determine the engineer will measure the covering over the glazing	exact periphenge ne perimeter ing g edge may be	ry of the windshield nside the retainer or e removed for exact	because the glazing molding at several measurement of the
1. 1.1	Pre-Crash Describe from visual inspec	tion how the windshield	is mounted ar	nd describe any trim	material.
1.2 1.3 1.4 1.5	Mark the longitudinal center Measure pre-crash A, B, an Measure pre-crash C, D, an Measure from the edge of the Dimension G: mm	d C for the left side and d E for the right side and	d record in the	e chart below.	
2. 2.1	Post Crash Can a single thickness of co and the vehicle body? No-Pass. Skip to the tab the post crash column, and Yes, go to 2.2.	le of measurements, co	mplete it by re	epeating the pre-cras	
	Visibly mark the beginning a windshield and the vehicle be Measure and record post-cr the parts of the windshield windshi	nody. ash A, B, C, D, E, and F where the paper slides b recent retention for the rice ention less than 75%?	such that the etween the wi	e measurements do indshield and the ve	not include any of hicle body.
I certify	that I have read and perform	ned each instruction.	- - ,	 Date	

WINDSHIELD PERIPHERY ME	EASUREMENT
-------------------------	------------

	Dimension	Pre-crash mm	Post-crash mm	Percent Retention (Post-crash ÷ Pre-crash)
Left side	Α			
	В			
	С			
	Total			
Right side	D			
	E			
	F			
	Total			

Indicate area of mounting failure.

FRONT VIEW OF WINDSHIELD



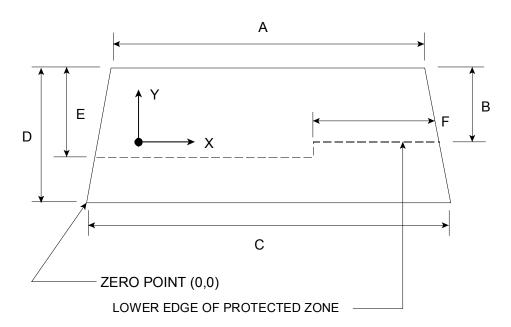
DATA SHEET 40 WINDSHIELD ZONE INTRUSION (FMVSS 219)

NHTSA No Test Date:	
Laboratory: Test Technician(s):	_
Impact Angle: Belted Dummies:YesNo	
Test Speed:32 to 40 kmph0 to 48 kmph0 to 56 kmph	
Driver Dummy: 5 th female 50 th male Passenger Dummy: 5 th female 50 th male	
 Place a 165 mm diameter rigid sphere, with a mass of 6.8 kg on the instrument panel simultaneously touching the instrument panel and the windshield. (571.219 S6.1(a)) Roll the sphere from one side of the windshield to the other while marking on the windsphere contacts the windshield. (571.219 S6.1(b)) From the outermost contactable points on the windshield draw a horizontal line to the windshield. (571.219 S6.1(b)) Draw a line on the inner surface of the windshield that is 13 mm below the line determand 3. After the crash test, record any points where a part of the exterior of the vehicle has ror broken the windshield. 	dshield where the edges of the mined in items 2

SKETCH OF FRONT VIEW OF WINDSHIELD:

Provide all dimensions necessary to reproduce the protected area.

FRONT VIEW OF WINDSHIELD



A. Windshield Dimensions

Α	В	С	D	E	F

TP208-12

AREA OF PROTECTED ZONE FAILURES:

	X	Υ	
	^	Ť	
Provide co	ordinates of the area beneath th	e protected zone template that the in	ner surface of
windshield	was penetrated by a vehicle cor	mponent	
	Х	Y	
IARKS:			

DATA SHEET 41FUEL SYSTEM INTEGRITY (FMVSS 301)

TEST V	T VEHICLE NHTSA NO.:; TEST DATE:	
VEHICL	ICLE YEAR/MAKE/MODEL/BODY STYLE:	
TYPE C	E OF IMPACT:	
STODE	DDARD SOLVENT SPILLAGE MEASUREMENT:	
A.	From impact until vehicle motion ceases —	
	Actual = grams. (Maximum Allowable = 28 grams)	
B.	For 5 minute period after vehicle motion ceases —	
	Actual = grams. (Maximum Allowable = 142 grams)	
C.	For next 25 minutes —	
	Actual =grams . (Maximum Allowable = 28 grams/minute)	
D.	Provide Spillage Details:	

REMARKS:

FMVSS 301 STATIC ROLLOVER DATA SHEET

A. TEST PHASE = 00 TO 90°

Determination of Stoddard Solvent Collection Time Period:

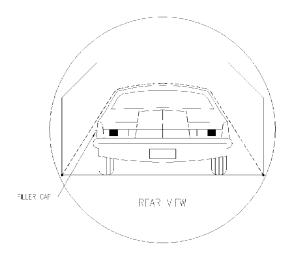
Rollover Fixture 90o Rotation Time = ___ minutes,
 __ seconds

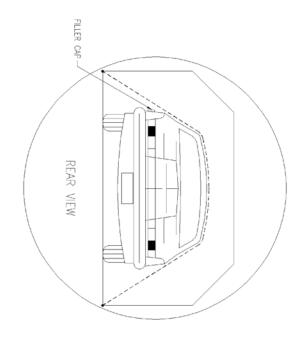
(Specified Range is 1 to 3 minutes)

- 2. FMVSS 301 Position Hold Time = 5 minutes, 0 seconds
- 3. TOTAL = ___ minutes, ___ seconds
- 4. NEXT WHOLE MINUTE INTERVAL = ___ minutes

Actual Test Vehicle Stoddard Solvent Spillage:

- 1. First 5 minutes from onset of rotation = ___ grams (142 grams allowed)
- 2. 6th minute = ___grams (28 grams allowed)
- 3. 7th minute = ___ grams (28 grams allowed)
- 4. 8th minute (if required) = ____ grams (28 grams allowed)





B. TEST PHASE = 90° TO 180°

Determination of Stoddard Solvent Collection Time Period:

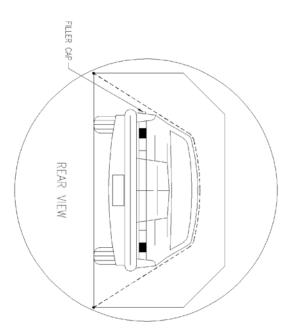
1. Rollover Fixture 90°
Rotation Time = ___ minutes, ___ seconds

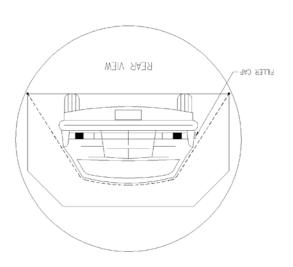
(Specified Range is 1 to 3 minutes)

- 2. FMVSS 301 Position Hold Time = 5 minutes, 0 seconds
- 3. TOTAL = ___ minutes, ___ seconds
- 4. NEXT WHOLE MINUTE INTERVAL = ___ minutes

Actual Test Vehicle Stoddard Solvent Spillage:

- 1. First 5 minutes from onset of rotation = ___ grams (142 grams allowed)
- 2. 6th minute = ___ grams (28 grams allowed)
- 3. 7th minute = ___ grams (28 grams allowed)
- 4. 8th minute (if required) = ___ grams (28 grams allowed)





C. TEST PHASE = 180° TO 270°

Determination of Stoddard Solvent Collection Time Period:

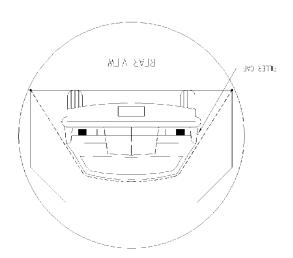
1. Rollover Fixture 90°
Rotation Time = ___ minutes, ___ seconds

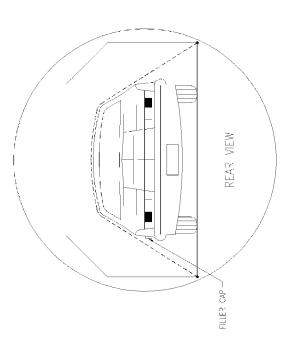
(Specified Range is 1 to 3 minutes)

- 2. FMVSS 301 Position Hold Time = 5 minutes, 0 seconds
- 3. TOTAL = ___ minutes, ___ seconds
- 4. NEXT WHOLE MINUTE INTERVAL = ___ minutes

Actual Test Vehicle Stoddard Solvent Spillage:

- 1. First 5 minutes from onset of rotation = ___grams (142 grams allowed)
- 2. 6th minute = ___ grams. (28 grams allowed)
- 3. 7th minute = ___ grams (28 grams allowed)
- 4. 8th minute (if required) = ___ grams. (28 grams allowed)





D. TEST PHASE = 270° TO 360°

Determination of Stoddard Solvent Collection Time Period:

1. Rollover Fixture 90°
Rotation Time = ___ minutes, ___ seconds

(Specified Range is 1 to 3 minutes)

- 2. FMVSS 301 Position Hold Time = 5 minutes, 0 seconds
- 3. TOTAL = ___ minutes, ___ seconds
- 4. NEXT WHOLE MINUTE INTERVAL = ___ minutes

Actual Test Vehicle Stoddard Solvent Spillage:

- 1. First 5 minutes from onset of rotation = ___ grams (142 grams allowed)
- 2. 6th minute = ___ grams (28 grams allowed)
- 3. 7th minute = ___ grams. (28 grams allowed)
- 4. 8th minute (if required) = ___ grams. (28 grams allowed)

